

# **Guide to the MCC Indicators for Fiscal Year 2021**

October 23, 2020



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## Introduction

The Millennium Challenge Corporation (MCC) is an independent U.S. Government agency with the mission to reduce poverty in developing countries through sustainable economic growth.

Each year, the MCC Board of Directors (Board) selects countries as eligible for MCC assistance. The selection process begins with the Board identifying candidate countries to consider; which, by law, are all countries with per capita incomes below the World Bank's threshold between lower middle income countries and upper middle income countries that are not prohibited from receiving assistance by federal law. For a candidate country to then be selected as eligible to receive assistance, it must demonstrate a commitment to just and democratic governance, investing in its people, and economic freedom as measured by independent policy indicators. These indicators inform the Board of candidate countries' broad policy framework for encouraging poverty reduction through economic growth.

These indicators are compiled into country scorecards. This is a guide to understanding and interpreting the indicators used on the country scorecards by MCC in Fiscal Year 2021. It provides an overview of the policies measured by the indicators, the relationship that these policies have to economic growth and poverty reduction, the methodologies used by the various indicator institutions to measure policy performance, descriptions of the underlying source(s) of data, and the contact information of the indicator institutions. This document also provides the specific information for how MCC constructs the final indicators from these sources. The scorecards produced using these indicators are available at: <https://www.mcc.gov/who-we-fund/scorecards>.

For general questions about the application of these indicators, please contact MCC's Selection, Eligibility, and Policy Performance Division at [DevelopmentPolicy@mcc.gov](mailto:DevelopmentPolicy@mcc.gov).

## Indicators—What They Measure

The MCC scorecards measure performance on the policy criteria mandated in MCC's authorizing legislation. By using information collected from independent third-party sources, MCC's country selection process allows for an objective, comparable analysis across candidate countries.

MCC favors indicators that:

1. are developed by an independent third party,
2. use an analytically-rigorous methodology and objective, high-quality data,
3. are publicly available,
4. have broad country-coverage among MCC candidate countries,
5. are comparable across countries,
6. have a clear theoretical or empirical link to economic growth and poverty reduction,
7. are policy-linked, i.e. measure factors that governments can influence, and

8. have appropriate consistency in results from year to year.

## Ruling Justly

These indicators measure just and democratic governance, including a country's demonstrated commitment to promoting political pluralism, equality, and the rule of law; respecting human and civil rights; protecting private property rights; encouraging transparency and accountability of government; and combating corruption.

- **Political Rights** – Independent experts rate countries on: the prevalence of free and fair elections of officials with real power; the ability of citizens to form political parties that may compete fairly in elections; freedom from domination by the military, foreign powers, totalitarian parties, religious hierarchies and economic oligarchies; and the political rights of minority groups, among other things. *Source: Freedom House*
- **Civil Liberties** – Independent experts rate countries on: freedom of expression; association and organizational rights; rule of law and human rights; and personal autonomy and economic rights, among other things. *Source: Freedom House*
- **Control of Corruption** – An index of surveys and expert assessments that rate countries on: “grand corruption” in the political arena; the frequency of petty corruption; the effects of corruption on the business environment; and the tendency of elites to engage in “state capture,” among other things. *Source: World Bank/Brookings Institution's Worldwide Governance Indicators*
- **Government Effectiveness** – An index of surveys and expert assessments that rate countries on: the quality of public service provision; civil servants' competency and independence from political pressures; and the government's ability to plan and implement sound policies, among other things. *Source: World Bank/Brookings Institution's Worldwide Governance Indicators*
- **Rule of Law** – An index of surveys and expert assessments that rate countries on: the extent to which the public has confidence in and abides by the rules of society; the incidence and impact of violent and nonviolent crime; the effectiveness, independence, and predictability of the judiciary; the protection of property rights; and the enforceability of contracts, among other things. *Source: World Bank/Brookings Institution's Worldwide Governance Indicators*
- **Freedom of Information** – Measures the legal and practical steps taken by a government to enable or allow information to move freely through society; this includes measures of press freedom, national freedom of information laws, and the extent to which a country is shutting down the internet or social media. *Source: Access Now / Centre for Law and Democracy / Reporters Without Borders*

## Investing in People

These indicators measure investments in the promotion of broad-based primary education, strengthened capacity to provide quality public health, the reduction of child mortality, and the sustainable management of natural resources.

- **Immunization Rates** – The average of DPT3 and measles immunization coverage rates for the most recent year available. *Source: WHO and the United Nations Children's Fund (UNICEF)*
- **Public Expenditure on Health** – Total expenditures on health by government at all levels divided by gross domestic product (GDP). *Source: The World Health Organization (WHO)*

- **Public Expenditure on Primary Education** – Total expenditures on primary education by government at all levels divided by GDP. *Source: The United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute of Statistics and National Governments*
- **Girls' Primary Education Completion Rate** – The number of female students enrolled in the last grade of primary education minus repeaters divided by the population in the relevant age cohort (gross intake ratio in the last grade of primary). *Source: UNESCO Institute of Statistics and National Governments*
- **Girls' Secondary Education Enrollment Rate** – The number of female pupils enrolled in lower secondary school, regardless of age, expressed as a percentage of the population of females in the theoretical age group for lower secondary education. Countries with a GNI per capita between \$1,946 and \$4,045 will be assessed on this indicator instead of Girls Primary Completion Rates. *Source: UNESCO Institute of Statistics and National Governments*
- **Child Health** – An index made up of three indicators: access to improved water, access to improved sanitation, and child (ages 1-4) mortality. *Source: The Center for International Earth Science Information Network and the Yale Center for Environmental Law and Policy*
- **Natural Resource Protection** – Assesses whether countries are protecting up to 17 percent of all their biomes (e.g., deserts, tropical rainforests, grasslands, savannas and tundra). *Source: The Center for International Earth Science Information Network and the Yale Center for Environmental Law and Policy*

## Encouraging Economic Freedom

These indicators measure the extent to which a government encourages economic freedom, including a demonstrated commitment to economic policies that: encourage individuals and firms to participate in global trade and international capital markets, promote private sector growth and strengthen market forces in the economy.

- **Regulatory Quality** – An index of surveys and expert assessments that rate countries on: the burden of regulations on business; price controls; the government's role in the economy; and foreign investment regulation, among other areas. *Source: World Bank/Brookings Institution's Worldwide Governance Indicators*
- **Land Rights and Access** – An index that rates countries on the extent to which the institutional, legal, and market frameworks provide secure land tenure and equitable access to land in rural areas, and the time and cost of property registration in urban and peri-urban areas. *Source: International Fund for Agricultural Development and International Finance Corporation*
- **Access to Credit** – An index that rates countries on rules and practices affecting the coverage, scope and accessibility of credit information available through either a public credit registry or a private credit bureau; as well as legal rights in collateral laws and bankruptcy laws. *Source: International Finance Corporation*
- **Business Start-Up** – An index that rates countries on the time and cost of complying with all procedures officially required for an entrepreneur to start up and formally operate an industrial or commercial business. *Source: International Finance Corporation*
- **Trade Policy** – A measure of a country's openness to international trade based on weighted average tariff rates and non-tariff barriers to trade. *Source: The Heritage Foundation's Index of Economic Freedom*
- **Inflation** – The most recent average annual change in consumer prices. *Source: The International*

*Monetary Fund's (IMF) World Economic Outlook Database*

- **Fiscal Policy** – General government net lending/borrowing as a percent of GDP, averaged over a three-year period. Net lending/borrowing is calculated as revenue minus total expenditure.

*Source: The IMF's World Economic Outlook Database*

- **Gender in the Economy** – An index that measures the extent to which laws provide women equal capacity to participate in the economy, as well as equality in getting a job, owning property, going to court, and being protected from violence. *Source: World Bank*

## Determining MCC Candidacy

For Fiscal Year 2021 (FY21), 78 countries meet the income parameters for MCC candidacy (with 63 being candidates and 15 meeting the income parameters but that are statutorily prohibited from receiving assistance). MCC creates scorecards for all 78 countries that meet the income parameters. A country is determined to be an MCC candidate if its per capita income falls within predetermined parameters set by Congress and it is not subject to certain restriction on U.S. foreign assistance. Those parameters are that the country must be classified as either low income or lower middle income by the World Bank (which means it is estimated to have a Gross National Income (GNI) per capita (Atlas Method) less than the World Bank's lower middle income country threshold of \$4,045 in FY21, as published in the World Bank's July release of income data.<sup>1</sup> See the [FY21 Candidate Country Report](#) for additional information.

## Setting the Scorecard Income Groups

For FY21, MCC is continuing to use the historical ceiling for eligibility as set by the World Bank's International Development Association (IDA) (often referred to as the 'Historical IDA Threshold') to divide the 78 countries into two income groups for the purpose of comparative analysis on the scorecard policy performance indicators. These two income groups are: 1) countries whose GNI per capita is less than or equal to \$1,945 in FY21 and 2) those countries whose GNI per capita falls between \$1,946 and \$4,045 in FY21. For additional information, see the [FY21 Selection Criteria and Methodology Report](#).

## Indicator Performance

A country is considered to "pass" a given indicator if it performs better than the median score in its income group or the absolute threshold (for certain indicators – see below). A country is considered to "pass" the scorecard if it: (i) "passes" at least ten of the 20 indicators; (ii) "passes" the *Control of Corruption* indicator; and, (iii) "passes" either the *Civil Liberties* or *Political Rights* indicator. For technical specifics regarding how these medians are calculated see the Note on Calculating Medians at the end of this document. Indicators with absolute thresholds in lieu of a median include:

1. *Inflation*, on which a country's inflation rate must be *under* a fixed ceiling of 15 percent;
2. Immunization Rates, on which a country must have immunization coverage *above* 90% or the median, whichever is lower;
3. Political Rights, on which countries must score *above* 17; and
4. Civil Liberties, on which countries must score *above* 25.

The Board also takes into consideration whether a country performs substantially worse in any category (*Ruling Justly*, *Investing in People*, or *Economic Freedom*) than it does on the overall scorecard. While the indicator methodology is the predominant basis for determining which countries will be eligible for MCA assistance, the Board also considers supplemental information and takes into account factors such as time lags and gaps in the data used to determine indicator scores.

## Example Scorecard

For reference, this is an example of a scorecard from FY20 and a guide for reading each of the indicators.

# Senegal FY20

Population: 15,854,000  
 GNI/Cap: \$1,410  
 Category: GNI/Cap ≤ \$1,925

Half Scorecard Passed ✓

Control of Corruption ✓

Democratic Rights ✓



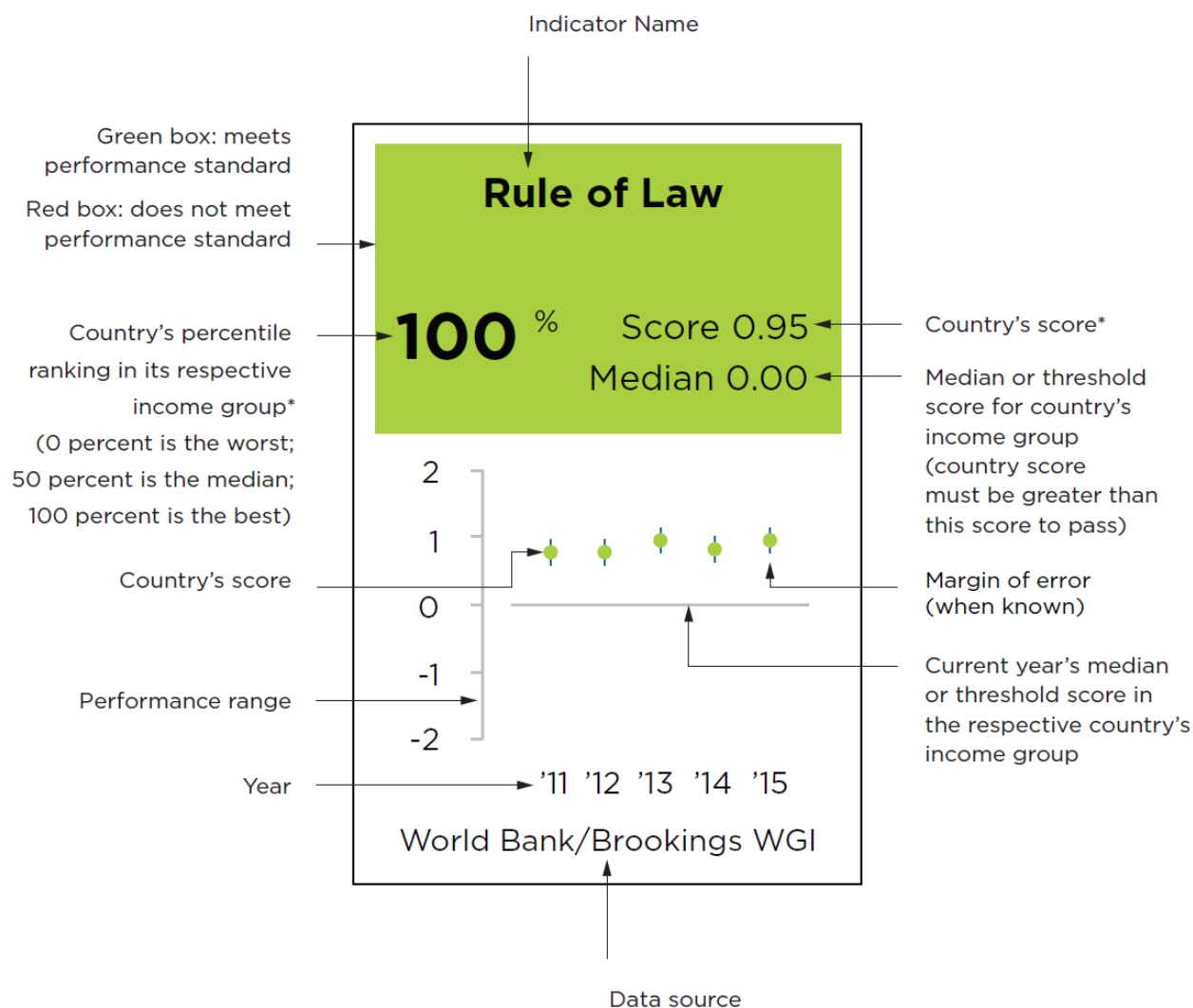
## Senegal FY 20 Scorecard



## Reading the Scores—A Reference Guide

Every year each MCC candidate country receives a scorecard assessing performance in three policy categories: *Ruling Justly*, *Investing in People*, and *Encouraging Economic Freedom*.

For more information regarding the MCC Selection Process and these indicators, please visit MCC's website at [www.mcc.gov/selection](http://www.mcc.gov/selection)



\*For the Political Rights, Civil Liberties, Inflation, and Immunization Rates (when the median is above 90%) indicators, the score and percent ranking are reversed due to those indicators operating on a minimum or maximum-score system rather than a median-based system.

**A reference for reading MCC scorecards.**

## Ruling Justly Category

The six indicators in this category measure just and democratic governance by assessing, among other things, a country's demonstrated commitment to promote political pluralism, equality, and the rule of law; respect human and civil rights, including the rights of people with disabilities; protect private property rights; encourage transparency and accountability of government; and combat corruption.

### Political Rights Indicator

This indicator measures country performance on the quality of the electoral process, political pluralism and participation, government corruption and transparency, and fair political treatment of ethnic groups.

Countries are rated on the following factors:

- free and fair executive and legislative elections; fair polling; honest tabulation of ballots;
- fair electoral laws; equal campaigning opportunities;
- the right to organize in different political parties and political groupings; the openness of the political system to the rise and fall of competing political parties and groupings;
- the existence of a significant opposition vote; the existence of a de facto opposition power, and a realistic possibility for the opposition to increase its support or gain power through elections;
- the participation of cultural, ethnic, religious, or other minority groups in political life;
- freedom from domination by the military, foreign powers, totalitarian parties, religious hierarchies, economic oligarchies, or any other powerful group in making personal political choices; and
- the openness, transparency, and accountability of the government to its constituents between elections; freedom from pervasive government corruption; government policies that reflect the will of the people.

### Relationship to Growth and Poverty Reduction

Although the relationship between democracy and economic growth is complex, research suggests that the institutional structures of democracy can promote growth by increasing policy stability, cultivating higher rates of human capital accumulation, reducing levels of income inequality and corruption, and encouraging higher rates of investment.<sup>2</sup> The links between political rights and poverty reduction are similarly complicated, but there is evidence that democratic institutions are better at reducing economic volatility and provide a more consistent approach to poverty reduction than do autocratic regimes.<sup>3</sup> Research also links the incentive structure of democratic institutions with outcomes favorable for the poor.<sup>4</sup>

### Source

Freedom House, <http://www.freedomhouse.org>. Questions regarding this indicator may be directed to [info@freedomhouse.org](mailto:info@freedomhouse.org) or +1 (212) 514-8040.

## Indicator Institution Methodology

The Political Rights indicator is based on a team of expert analysts and scholars evaluating countries using a ten question checklist grouped into the three subcategories: Electoral Process (3 questions), Political Pluralism and Participation (4 questions), and Functioning of Government (3 questions). Points are awarded to each question on a scale of 0 to 4, where 0 points represents the fewest rights and 4 represents the most rights. The highest number of points that can be awarded to the Political Rights checklist is 40 (or a total of up to 4 points for each of the 10 questions). There is also an additional, discretionary, political rights question which can subtract up to 4 points from a country's score. The full list of questions included in Freedom House's methodology may be found at: <https://freedomhouse.org/reports/freedom-world/freedom-world-research-methodology>.

In consultation with Freedom House, MCC considers countries with scores above 17 to be passing this indicator.

## MCC Methodology

Freedom House publishes a 1-7 scale (where 7 is "least free" and 1 is "most free") for Political Rights. Since its *Freedom in the World 2006* report, Freedom House has also released data using a 0-40 scale for Political Rights (where 0 is "least free" and 40 is "most free"). Table 1 illustrates how the 1-7 scale used prior to Fiscal Year 2007 (FY07) corresponds to the new 0-40 scale.

New Scale	Old Scale
36-40	1
30-35	2
24-29	3
18-23	4
12-17	5
6-11	6
0-5	7

MCC adjusts the years on the x-axis of the Country Scorecards to correspond to the period of time covered by the *Freedom in the World* publication. For instance, FY21 Political Rights data come from *Freedom in the World 2020* and are labeled as 2019 data on the scorecard (the year Freedom House is reporting on in its 2020 report.)

## Civil Liberties Indicator

This indicator measures country performance on freedom of expression and belief, associational and organizational rights, rule of law and human rights, personal autonomy, individual and economic rights,

and the independence of the judiciary.

Countries are rated on the following factors:

- freedom of cultural expression, religious institutions and expression, and academia;
- freedom of assembly and demonstration, of political organization and professional organization, and collective bargaining;
- independence of the media and the judiciary;
- freedom from economic exploitation;
- protection from police terror, unjustified imprisonment, exile, and torture;
- the existence of rule of law, personal property rights, and equal treatment under the law;
- freedom from indoctrination and excessive dependency on the state;
- equality of opportunity;
- freedom to choose where to travel, reside, and work;
- freedom to select a marriage partner and determine whether or how many children to have; and
- the existence of a legal framework to grant asylum or refugee status in accordance with international and regional conventions and system for refugee protection.

### **Relationship to Growth and Poverty Reduction:**

Studies show that an expansion of civil liberties can promote economic growth by reducing social conflict, removing legal impediments to participation in the economy, encouraging adherence to the rule of law, enhancing protection of property rights, increasing economic rates of return on government projects, and reducing the risk of project failure.<sup>5</sup> Additional research has shown that civil liberties have a positive effect on domestic investment and productivity, increase the success of investments by international actors, enhance economic freedoms, and can bolster growth through the freedom of mobility for individuals.<sup>6</sup>

### **Source**

Freedom House, <http://www.freedomhouse.org>. Questions regarding this indicator may be directed to [info@freedomhouse.org](mailto:info@freedomhouse.org) or +1 (212) 514-8040.

### **Indicator Institution Methodology**

A team of expert analysts and scholars evaluate countries on a 60-point scale – with 60 representing “most free” and 0 representing “least free.” The Civil Liberties indicator is based on a 15 question checklist grouped into four subcategories: Freedom of Expression and Belief (4 questions), Associational and Organizational Rights (3 questions), Rule of Law (4 questions), and Personal Autonomy and Individual Rights (4 questions). Points are awarded to each question on a scale of 0 to 4, where 0 points represents the fewest liberties and 4 represents the most liberties. The highest number of points that can be awarded to the Civil Liberties checklist is 60 (or a total of up to 4 points for each of the 15 questions). The full list of questions included in Freedom House’s methodology may be found at:

<https://freedomhouse.org/reports/freedom-world/freedom-world-research-methodology>.

In consultation with Freedom House, MCC considers countries with scores above 25 to be passing this indicator.

## MCC Methodology

Freedom House publishes a 1-7 scale (where 7 is “least free” and 1 is “most free”) for Civil Liberties. Since its *Freedom in the World 2006* report, Freedom House has also released data using a 0-60 scale (where 0 is “least free” and 60 is “most free”) for Civil Liberties. Table 2 illustrates how the 1-7 scale used prior to FY07 corresponds to the new 0-60 scale.

New Scale	Old Scale
53-60	1
44-52	2
35-43	3
26-34	4
17-25	5
8-16	6
0-7	7

MCC adjusts the years on the x-axis of the Country Scorecards to correspond to the period of time covered by the *Freedom in the World* publication. For instance, FY21 Civil Liberties data come from *Freedom in the World 2020* and are labeled as 2019 data on the scorecard (the year Freedom House is reporting on in its 2020 report).

## Control of Corruption Indicator

This indicator measures the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as “capture” of the state by elites and private interests. It also measures the strength and effectiveness of a country’s policy and institutional framework to prevent and combat corruption.

Countries are evaluated on the following factors:

- The prevalence of grand corruption and petty corruption at all levels of government;
- The effect of corruption on the “attractiveness” of a country as a place to do business;
- The frequency of “irregular payments” associated with import and export permits, public contracts, public utilities, tax assessments, and judicial decisions;
- Nepotism, cronyism and patronage in the civil service;
- The estimated cost of bribery as a share of a company’s annual sales;
- The perceived involvement of elected officials, border officials, tax officials, judges, and magistrates

in corruption;

- The strength and effectiveness of a government's anti-corruption laws, policies, and institutions;
- Public trust in the financial honesty of politicians;
- The extent to which:
  - processes are put in place for accountability and transparency in decision-making and disclosure of information at the local level;
  - government authorities monitor the prevalence of corruption and implement sanctions transparently;
  - conflict of interest and ethics rules for public servants are observed and enforced;
  - the income and asset declarations of public officials are subject to verification and open to public and media scrutiny;
  - senior government officials are immune from prosecution under the law for malfeasance;
  - the government provides victims of corruption with adequate mechanisms to pursue their rights;
  - the tax administrator implements effective internal audit systems to ensure the accountability of tax collection;
  - the executive budget-making process is comprehensive and transparent and subject to meaningful legislative review and scrutiny;
  - the government ensures transparency, open-bidding, and effective competition in the awarding of government contracts;
  - there are legal and functional protections for whistleblowers, anti-corruption activists, and investigators;
  - allegations of corruption at the national and local level are thoroughly investigated and prosecuted without prejudice;
  - government is free from excessive bureaucratic regulations, registration requirements, and/or other controls that increase opportunities for corruption;
  - citizens have a legal right to information about government operations and can obtain government documents at a nominal cost.

## Relationship to Growth and Poverty Reduction

Corruption hinders economic growth by increasing costs, lowering productivity, discouraging investment, reducing confidence in public institutions, limiting the development of small and medium-sized enterprises, weakening systems of public financial management, and undermining investments in health and education.<sup>7</sup> Corruption can also increase poverty by slowing economic growth, skewing government expenditure in favor of the rich and well-connected, concentrating public investment in unproductive projects, promoting a more regressive tax system, siphoning funds away from essential public services, adding a higher level of risk to the investment decisions of low-income individuals, and reinforcing patterns of unequal asset ownership, thereby limiting the ability of the poor to borrow and increase their income.<sup>8</sup>

## Source

Worldwide Governance Indicators (WGI) from the World Bank/Brookings Institution, <http://info.worldbank.org/governance/wgi/>. Questions regarding this indicator may be directed to [wgi@worldbank.org](mailto:wgi@worldbank.org) or +1 (202) 473-4557.

## Indicator Institution Methodology

The indicator is an index combining a subset of 22 different assessments and surveys, depending on availability, each of which receives a different weight, depending on its estimated precision and country coverage. The Control of Corruption indicator draws on data, as applicable, from the *Country Policy and Institutional Assessments* of the World Bank, the Asian Development Bank and the African Development Bank, the *Afrobarometer* Survey, the World Bank's *Business Environment and Enterprise Performance Survey*, the Bertelsmann Foundation's *Bertelsmann Transformation Index*, Freedom House's *Nations in Transit* report, Global Insight's *Business Conditions and Risk Indicators*, the Economist Intelligence Unit's *Country Risk Service*, Transparency International's *Global Corruption Barometer* survey, the World Economic Forum's *Global Competitiveness Report*, Global Integrity's *African Integrity Index* (previously known as the *Global Integrity Index*), the Gallup *World Poll*, the International Fund for Agricultural Development's *Rural Sector Performance Assessments*, the French Government's *Institutional Profiles Database*, the *Latinobarometro* Survey, Political Economic Risk Consultancy's *Corruption in Asia*, Political Risk Service's *International Country Risk Guide*, Vanderbilt University *Americas Barometer* Survey, the Institute for Management and Development's *World Competitiveness Yearbook*, Varieties of Democracy's *Corruption Index*, and the World Justice Project's *Rule of Law Index*.

## MCC Methodology

**MCC Normalized Score = WGI Score – median score**

For ease of interpretation, MCC has adjusted the median for each of the two scorecard income pools to zero for all of the Worldwide Governance Indicators. Country scores are calculated by taking the difference between actual scores and the median. For example, in FY20 the unadjusted median for the scorecard category of countries with a Gross National Income (GNI) per capita between \$1,926 and \$3,995 on Control of Corruption was -0.52 (note, in FY21, the GNI per capita range for this scorecard category is \$1,946 to \$4,045). In order to set the median at zero, we simply add 0.52 to each country's score (the same thing as subtracting a negative 0.52). Therefore, as an example, Angola's FY20 Control of Corruption score, which was originally -1.14, was adjusted to -0.63.

The FY21 scores come from the 2020 update of the Worldwide Governance Indicators dataset and largely reflect performance in calendar year 2019. Since the release of the 2006 update of the Worldwide Governance Indicators, the indicators are updated annually. Each year, the World Bank and Brookings Institution also make minor backward revisions to the historical data. Prior to 2006, the World Bank released data every two years (1996, 1998, 2000, 2002 and 2004). With the 2006 release, the World Bank moved to an annual reporting cycle and provided additional historical data for 2003 and 2005.

## Government Effectiveness Indicator

This indicator measures the quality of public services, the quality of the civil service and its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the

government's commitment to its stated policies.

Countries are evaluated on the following factors:

- competence of civil service; effective implementation of government decisions; and public service vulnerability to political pressure;
- ability to manage political alternations without drastic policy changes or interruptions in government services;
- flexibility, learning, and innovation within the political leadership; ability to coordinate conflicting objectives into coherent policies;
- the efficiency of revenue mobilization and budget management;
- the quality of transportation infrastructure, telecommunications, electricity supply, public health care provision, and public schools; the availability of online government services;
- policy consistency; the extent to which government commitments are honored by new governments;
- prevalence of red tape; the degree to which bureaucratic delays hinder business activity;
- existence of a taxpayer service and information program, and an efficient and effective appeals mechanism;
- the extent to which:
  - effective coordination mechanisms ensure policy consistency across departmental boundaries, and administrative structures are organized along functional lines with little duplication;
  - the business processes of government agencies are regularly reviewed to ensure efficiency of decision making and implementation;
  - political leadership sets and maintains strategic priorities and the government effectively implements reforms;
  - hiring and promotion within the government is based on merit and performance, and ethical standards prevail;
  - the government wage bill is sustainable and does not crowd out spending required for public services; pay and benefit levels do not deter talented people from entering the public sector; flexibility (that is not abused) exists to pay more attractive wages in hard-to-fill positions;
  - government revenues are generated by low-distortion taxes; import tariffs are low and relatively uniform, export rebate or duty drawbacks are functional; the tax base is broad and free of arbitrary exemptions; tax administration is effective and rule-based; and tax administration and compliance costs are low;
  - policies and priorities are linked to the budget; multi-year expenditure projections are integrated into the budget formulation process, and reflect explicit costing of the implications of new policy initiatives; the budget is formulated through systematic consultations with spending ministries and the legislature, adhering to a fixed budget calendar; the budget classification system is comprehensive and consistent with international standards; and off-budget expenditures are kept to a minimum and handled transparently;
  - the budget is implemented as planned, and actual expenditures deviate only slightly from planned levels;
  - budget monitoring occurs throughout the year based on well-functioning management information systems; reconciliation of banking and fiscal records is practiced comprehensively, properly, and in a timely way;



- in-year fiscal reports and public accounts are prepared promptly and regularly and provide full and accurate data; the extent to which accounts are audited in a timely, professional and comprehensive manner, and appropriate action is taken on budget reports and audit findings.

## Relationship to Growth and Poverty Reduction

Countries with more effective governments tend to achieve higher levels of economic growth by obtaining better credit ratings and attracting more investment, offering higher quality public services and encouraging higher levels of human capital accumulation, putting foreign aid resources to better use, accelerating technological innovation, and increasing the productivity of government spending.<sup>9</sup> Efficiency in the delivery of public services also has a direct impact on poverty.<sup>10</sup> On average, countries with more effective governments have better educational systems and more efficient health care.<sup>11</sup> There is evidence that countries with independent, meritocratic bureaucracies do a better job of vaccinating children, protecting the most vulnerable members of society, reducing child mortality, and curbing environmental degradation.<sup>12</sup> Countries with a meritocratic civil service also tend to have lower levels of corruption.<sup>13</sup>

## Source

Worldwide Governance Indicators (WGI) from the World Bank/Brookings Institution, <http://info.worldbank.org/governance/wgi/>. Questions regarding this indicator may be directed to [wgi@worldbank.org](mailto:wgi@worldbank.org) or +1 (202) 473-4557.

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The indicator is an index combining a subset of 16 different assessments and surveys, depending on availability, each of which receives a different weight, depending on its estimated precision and country coverage. The Government Effectiveness indicator draws on data, as applicable, from the *Country Policy and Institutional Assessments* of the World Bank, the African Development Bank and the Asian Development Bank, the *Afrobarometer Survey*, the World Bank's *Business Environment and Enterprise Performance Survey*, the Bertelsmann Foundation's *Bertelsmann Transformation Index*, Global Insight's *Business Conditions and Risk Indicators*, Global Integrity's *African Integrity Index* (previously known as the *Global Integrity Index*), the Economist Intelligence Unit's *Country Risk Service*, the World Economic Forum's *Global Competitiveness Report*, the Gallup *World Poll*, the International Fund for Agricultural Development's *Rural Sector Performance Assessments*, the French Government's *Institutional Profiles Database*, the *Latinobarometro Survey*, Political Risk Service's *International Country Risk Guide*, and the Institute for Management and Development's *World Competitiveness Yearbook*.

## MCC Methodology

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## Rule of Law Indicator

This indicator measures the extent to which individuals and firms have confidence in and abide by the rules of society; in particular, it measures the functioning and independence of the judiciary, including the police, the protection of property rights, the quality of contract enforcement, as well as the likelihood of crime and violence.

Countries are evaluated on the following factors:

- public confidence in the police force and judicial system; popular observance of the law; a tradition of law and order; strength and impartiality of the legal system;
- prevalence of petty crime, violent crime, and organized crime; foreign kidnappings; economic impact of crime on local businesses; prevalence of human trafficking; government commitment to combating human trafficking;
- the extent to which a well-functioning and accountable police force protects citizens and their property from crime and violence; when serious crimes do occur, the extent to which they are reported to the police and investigated;
- security of private property rights; protection of intellectual property; the accuracy and integrity of the property registry; whether citizens are protected from arbitrary and/or unjust deprivation of property;
- the enforceability of private contracts and government contracts;
- the existence of an institutional, legal, and market framework for secure land tenure; equal access to land among men and women; effective management of common property resources; equitable user-rights over water resources for agriculture and local participation in the management of water resources;
- the prevalence of tax evasion and insider trading; size of the informal economy;
- independence, effectiveness, predictability, and integrity of the judiciary; compliance with court rulings; legal recourse for challenging government actions; ability to sue the government through independent and impartial courts; willingness of citizens to accept legal adjudication over physical

and illegal measures; government compliance with judicial decisions, which are not subject to change except through established procedures for judicial review;

- the independence of prosecutors from political direction and control;
- the existence of effective and democratic civilian state control of the police, military, and internal security forces through the judicial, legislative, and executive branches; the police, military, and internal security services respect human rights and are held accountable for any abuses of power;
- impartiality and nondiscrimination in the administration of justice; citizens are given a fair, public, and timely hearing by a competent, independent, and impartial tribunal; citizens have the right to independent counsel and those charged with serious felonies are provided access to independent counsel when it is beyond their means; low-cost means are available for pursuing small claims; citizens can pursue claims against the state without fear of retaliation;
- protection of judges and magistrates from interference by the executive and legislative branches; judges are appointed, promoted, and dismissed in a fair and unbiased manner; judges are appropriately trained to carry out justice in a fair and unbiased manner; members of the national-level judiciary must give reasons for their decisions; existence of a judicial ombudsman (or equivalent agency or mechanism) that can initiate investigations and impose penalties on offenders;
- law enforcement agencies are protected from political interference and have sufficient budgets to carry out their mandates; appointments to law enforcement agencies are made according to professional criteria; law enforcement officials are not immune from criminal proceedings;
- the existence of an independent reporting mechanism for citizens to complain about police actions; timeliness of government response to citizen complaints about police actions.

## Relationship to Growth and Poverty Reduction

Judicial independence is strongly linked to growth as it promotes a stable investment environment.<sup>14</sup> On average, business environments characterized by consistent policies and credible rules, such as secure property rights and contract enforceability, create higher levels of investment and growth.<sup>15</sup> Secure property rights and contract enforceability also have a positive impact on poverty by granting citizens secure rights to their own assets.<sup>16</sup> Research shows that people who do not have the resources or the connections to protect their rights informally are usually in most need of formal protection through efficient legal systems.<sup>17</sup>

## Source

Worldwide Governance Indicators (WGI) from the World Bank/Brookings Institution, <http://info.worldbank.org/governance/wgi/>. Questions regarding this indicator may be directed to [wgi@worldbank.org](mailto:wgi@worldbank.org) or +1 (202) 473-4557.

## Indicator Institution Methodology

The indicator is an index combining a subset of 22 different assessments and surveys, depending on availability, each of which receives a different weight, depending on its estimated precision and country coverage. The Rule of Law indicator draws on data, as applicable, from the *Country Policy and Institutional Assessments* of the World Bank, the African Development Bank and the Asian Development

Bank, the *Afrobarometer* Survey, the World Bank's *Business Environment and Enterprise Performance Survey*, the Bertelsmann Foundation's *Bertelsmann Transformation Index*, Freedom House's *Nations in Transit* report, Global Insight's *Business Conditions and Risk Indicators*, the Economist Intelligence Unit's *Country Risk Service*, the World Economic Forum's *Global Competitiveness Report*, Global Integrity's *African Integrity Index* (previously known as the *Global Integrity Index*), the Gallup *World Poll*, the Heritage Foundation's *Index of Economic Freedom*, the International Fund for Agricultural Development's *Rural Sector Performance Assessments*, the French Government's *Institutional Profiles Database*, the *Latinobarometro* Survey, Political Risk Service's *International Country Risk Guide*, the United States State Department's *Trafficking in Persons Report*, Vanderbilt University's *Americas Barometer*, Institute for Management and Development's *World Competitiveness Yearbook*, Varieties of Democracy's *Liberal Component Index*, and the World Justice Project's *Rule of Law Index*.

## MCC Methodology

**MCC Normalized Score = WGI Score – median score**

For ease of interpretation, MCC has adjusted the median for each of the two scorecard income pools to zero for all of the Worldwide Governance Indicators. Country scores are calculated by taking the difference between actual scores and the median. For example, in FY20 the unadjusted median for the scorecard category of countries with a Gross National Income (GNI) per capita between \$1,926 and \$3,995 on Control of Corruption was -0.52 (note, in FY21, the GNI per capita range for this scorecard category is \$1,946 to \$4,045). In order to set the median at zero, we simply add 0.52 to each country's score (the same thing as subtracting a negative 0.52). Therefore, as an example, Angola's FY20 Control of Corruption score, which was originally -1.14, was adjusted to -0.63.

The FY21 scores come from the 2020 update of the Worldwide Governance Indicators dataset and largely reflect performance in calendar year 2019. Since the release of the 2006 update of the Worldwide Governance Indicators, the indicators are updated annually. Each year, the World Bank and Brookings Institution also make minor backward revisions to the historical data. Prior to 2006, the World Bank released data every two years (1996, 1998, 2000, 2002 and 2004). With the 2006 release, the World Bank moved to an annual reporting cycle and provided additional historical data for 2003 and 2005.

## Freedom of Information Indicator

This indicator measures a government's commitment to enable or allow information to move freely in society. It is a composite index that includes a measure of press freedom; the status of national freedom of information laws; and a measure of internet filtering.

## Relationship to Growth and Poverty Reduction

Governments play a role in information flows; they can restrict or facilitate information flows within countries or across borders. Many of the institutions (laws, regulations, codes of conduct) that governments design are created to manage the flow of information in an economy.<sup>18</sup> Countries with

better information flows often have better quality governance and less corruption.<sup>19</sup> Higher transparency and access to information have been shown to increase investment inflows because they enhance an investor's knowledge of the behaviors and operations of institutions in a target economy; help reduce uncertainty about future changes in policies and administrative practices; contribute data and perspectives on how best an investment project can be initiated and managed; and allow for the increased coordination between social and political actors that typifies successful economic development.<sup>20</sup> The right of access to information within government institutions also strengthens democratic accountability, promotes political participation of all, reduces governmental abuses, and leads to more effective allocation of natural resources.<sup>21</sup> Access to information also empowers marginalized groups and those living in poverty by giving them the ability to more fully participate in society and providing them with knowledge that can be used for economic gain.<sup>22</sup> Internet shutdowns are harmful as they not only restrict the ability of civil society to engage in political participation and government oversight, but also restrict market access and cost economies billions of dollars each year.<sup>23</sup>

## Sources and Indicator Institution Methodologies

- I. Reports without Borders' (RSF) World Press Freedom Index, <https://rsf.org/en/ranking/2020>. Questions regarding this indicator may be directed to [index@rsf.org](mailto:index@rsf.org) or +33 1 44 83 84 65

*World Press Freedom Index methodology:* RSF compiles its data by pooling experts' responses to 87 questions related to pluralism, media independence, media environment and self-censorship, legislative framework, transparency, and the quality of the infrastructure that supports the production of news and information. This qualitative analysis is combined with quantitative data on abuses and acts of violence against journalists during the period evaluated.

- II. Centre for Law and Democracy and Access Info's Right to Information Index, <http://www.rti-rating.org/>. Questions regarding this indicator may be directed to Toby Mendel at [toby@law-democracy.org](mailto:toby@law-democracy.org) or +1 (902) 431-3688.

*Right to Information Methodology:* In this dataset, a freedom of information law is rated based on 61 indicators. RTI includes any country with a freedom of information law on the books.

- III. Access Now's #KeepItOn Shutdown Tracker Optimization Project, <https://www.accessnow.org/keepiton/>. Questions regarding this indicator may be directed to Berhan Taye at [berhan@accessnow.org](mailto:berhan@accessnow.org) or +1 (888) 414-0100.

*Access Now Methodology:* Countries are assigned one point for every day of internet or social media shutdown/throttling up to 9 days. Shutdowns listed as ongoing are assumed to last until the end of the year. Shutdowns that last less than one day are counted as one day. Shutdowns with no end date are assumed to only last one day. If no duration is listed, but a start and end date are listed, a duration is calculated. Non-government shutdowns and non-government throttlings are excluded.

## MCC Methodology

### MCC FOI Score = (Press) – (FOIA in place) + (Access Now)

This indicator uses a country's score on RSF's World Press Freedom Index (Press) as the base. In FY21, MCC uses RSF's 2020 World Press Freedom Index, which covers events in 2019. A country's base score may improve based on data from the Global Right to Information Rating. In FY21, MCC uses Centre for Law and Democracy / Access Info Europe's Global Right to Information Rating (RTI) from 2020. A country's score is improved by 4 points if they have a Freedom of Information law enacted. Data from Access Now is used to penalize some countries' base scores. A country's score is penalized 1 point for each day in the last calendar year (2019) of internet or social media shutdown/throttling, for a total penalty of up to 9 points. For FY21, MCC uses Access Now data from the 2019 #KeepItOn Shutdown Tracker Optimization Project report. On this index, lower is better.

*Note regarding construction of missing data:* Prior to FY20, MCC utilized Freedom House's Freedom of the Press scores for its Press component. In 2018, however, Freedom House stopped publishing Freedom of the Press, and MCC selected RSF's World Press Freedom Index as a replacement. Both indices measure similar concepts on an identical scale (0-100, with lower scores being better). However, because MCC is using a different indicator for Press in FY21, current year data on MCC's scorecard is not comparable to data found on prior year MCC scorecards.

In addition, the RSF index does not report data for all countries that had data reported by Freedom House. As such, MCC is using the most recent Freedom House "Freedom of the Press 2017" data for the five countries that had Freedom House data, but that are missing RSF data. Although RSF uses the same 0-100 scale for its data, the distribution of RSF country scores sits systematically lower on the scale than does Freedom House's. To account for this mismatch, MCC normalizes Freedom House scores for the five countries in the following manner:

- MCC identifies each missing country's percentile rank in the Freedom House global dataset, and then finds the score that would be at the corresponding percentile in the global RSF dataset (using the method of linear interpolation equivalent to the method used by Microsoft Excel in the function Percentile.Inc), and assigns that score to the country.
- Once this matching has been completed for each of the missing countries, and these normalized scores are added to the global RSF dataset, MCC then uses these scores as "Press" in the above equation to calculate the Freedom of Information scores and then percentile ranks for each income group.
- For example, Solomon Islands has a Freedom House score of 27 in 2017, which puts in at the 76<sup>th</sup> percentile in the global Freedom House dataset. The score at the 76<sup>th</sup> percentile of the global RSF dataset used in FY20 was 24.09. Therefore Solomon Island's normalized Press score was 24.09 for FY20.

## Investing in People Category

The indicators in this category measure investments in people by assessing the extent to which governments are promoting broad-based primary education, strengthening capacity to provide quality public health, increasing child health, and promoting the protection of biodiversity.

## Immunization Rates Indicator

This indicator measures a government's commitment to providing essential public health services and reducing child mortality.

### Relationship to Growth and Poverty Reduction

The Immunization Rates indicator is widely regarded as a good proxy for the overall strength of a government's public health system.<sup>24</sup> It is designed to measure the extent to which governments are investing in the health and well-being of their citizens. Immunization programs can impact economic growth through their broader impact on health.<sup>25</sup> Healthy workers are more economically productive and more likely to save and invest; healthy children are more likely to reach higher levels of educational attainment; and healthy parents are better able to invest in the health and education of their children.<sup>26</sup> Immunization programs also increase labor productivity among the poor, reduce spending to cope with illnesses, and lower mortality and morbidity among the main income-earners in poor families.<sup>27</sup>

### Source

The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), [http://www.who.int/immunization\\_monitoring/data/](http://www.who.int/immunization_monitoring/data/). Questions regarding this indicator may be directed to [vaccines@who.int](mailto:vaccines@who.int) or +41 22 791 2873.

### Indicator Institution Methodology

MCC uses the simple average of the national diphtheria-pertussis-tetanus (DPT3) vaccination rate and the measles (MCV) vaccination rate. The DPT3 immunization rate is measured as the number of children that have received their third dose of the diphtheria, pertussis (whooping cough), and tetanus toxoid vaccine divided by the target population (the number of children surviving their first year of life.) The measles immunization rate is measured as the number of children that have received their first dose of a measles-containing vaccine divided by the same target population.

To estimate national immunization coverage, WHO and UNICEF draw on two sources of empirical data: reports of vaccinations performed by service providers (administrative data) and surveys containing items on children's vaccination history (coverage surveys). Surveys are frequently used in conjunction with administrative data; in some instances—where administrative data differ substantially from survey results—surveys constitute the sole source of information on immunization coverage levels. There are a number of reasons survey data may be used over administrative data; for instance, in some cases, lack of precise information on the size of the target population (the denominator) can make immunization coverage difficult to estimate from administrative data alone. Estimates of the most likely true level of immunization coverage are based on the data available, consideration of potential biases, and contributions of local experts.

In consultation with the WHO, MCC considers countries which have immunization coverage above the median for their scorecard income pool to be passing this indicator. If the median is above 90% for an income pool in a year, countries in that income pool will be considered passing if they have immunization coverage above 90% (even if they score below the median).<sup>28</sup>

## MCC Methodology

**MCC Immunization Rate** =  $[0.5 \times \text{DPT3}] + [0.5 \times \text{MCV1}]$

MCC relies on official WHO/United Nations Children's Fund (UNICEF) estimates for all immunization data. MCC uses the simple average of the 2019 DPT3 coverage rate and the 2019 measles (MCV) coverage rate to calculate FY21 country scores. If a country is missing data for either DPT3 or Measles, it does not receive an index value. The same rule is applied to historical data. As better data become available, WHO/UNICEF make backward revisions to the historical data. In FY21, countries must have immunization rates (as defined above) greater than 90% or the median for their scorecard pool, whichever is lower, to pass this indicator.

## Health Expenditures Indicator

This indicator measures the government's commitment to investing in the health and well-being of its people.

### Relationship to Growth and Poverty Reduction

MCC generally strives to measure outcomes rather than inputs, but health outcomes can be very slow to adjust to policy changes. Therefore, the Health Expenditures indicator is used to gauge the extent to which governments are making investments in the health and well-being of their citizens.<sup>29</sup> A large body of literature links improved health *outcomes* to economic growth and poverty reduction.<sup>30</sup> While the link between expenditures and outcomes is never automatic in any country, it is generally positive when expenditures are managed and executed efficiently.<sup>31</sup> Research suggests that increased spending on health, when coupled with good policies and good governance, can promote growth, reduce poverty, and trigger declines in infant, child, and maternal mortality.<sup>32</sup>

### Source

World Health Organization (WHO), <http://www.who.int/nha/en/>. Questions regarding this indicator may be directed to [nhaweb@who.int](mailto:nhaweb@who.int).

### Indicator Institution Methodology

This indicator measures domestic general government health expenditure (GGHE-D) as a percentage of Gross Domestic Product (GDP). Domestic general government health expenditure includes outlays



earmarked for health maintenance, restoration or enhancement of the health status of the population, paid for in cash or in kind by the following financing agents: central/federal, state/provincial/regional, and local/municipal authorities; extra-budgetary agencies, social security schemes; and parastatals. All are financed through domestic funds. GGHE-D includes only current expenditures made during the year (excluding investment expenditures such as capital transfers). The classification of the functions of government (COFOG) promoted by the United Nations, the International Monetary Fund (IMF), OECD and other institutions sets the boundaries for public outlays. Figures are originally estimated in million national currency units (million NCU) and in current prices. GDP data are primarily drawn from the United Nations National Accounts statistics.

## **MCC Methodology**

This indicator measures public expenditure on health as a percent of gross domestic product (GDP). MCC relies on the World Health Organization (WHO) for data on public health expenditure. The WHO estimates domestic general government health expenditure (GGHE-D) — the sum of current outlays by government entities to purchase health care services and goods — in million national currency units (million NCU) and in current prices. GDP data are primarily drawn from the United Nations National Accounts statistics.

Prior to FY19, MCC utilized a slightly different indicator, which was discontinued by the WHO. Because MCC started using a different indicator from the WHO in FY19, data from FY19 onward on MCC's scorecard are not comparable to data found on MCC scorecards prior to FY19.

The FY21 scores come from the 2020 update of the Global health expenditure database and largely reflect performance in calendar year 2017.

## **Primary Education Expenditures Indicator**

This indicator measures the government's commitment to investing in primary education.

## **Relationship to Growth and Poverty Reduction**

While MCC generally strives to measure outcomes rather than inputs, educational outcome indicators can be very slow to adjust to policy changes, and adequate data on educational quality do not yet exist in a consistent manner across a large number of countries. Therefore, the Primary Education Expenditures indicator is used to gauge the extent to which governments are currently making investments in the education of their citizens. Research shows that, for given levels of quality, well-managed and well-executed government spending on primary education can improve educational attainment and increase economic growth.<sup>33</sup> There is also evidence that the returns to education to an economy as a whole are larger than the private returns.<sup>34</sup> Investments in basic education are also critical to poverty reduction. Research shows that regions that begin with higher levels of education generally see a larger poverty impact of economic growth.<sup>35</sup>

## Source

The United National Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics (UIS) is MCC's source of data, <http://www.uis.unesco.org>. UIS compiles primary education expenditure data from official responses to surveys and from reports provided by education authorities in each country. Questions regarding the UIS data may be directed to [survey@uis.unesco.org](mailto:survey@uis.unesco.org) or (514)-343-7752.

## Indicator Institution Methodology

UIS attempts to measure total current and capital expenditure on primary education at every level of administration—central, regional, and local. UIS data generally include subsidies for private education, but not foreign aid for primary education. UIS data may also exclude spending by religious schools, which plays a significant role in many developing countries.

Government outlays on primary education include expenditures on services provided to individual pupils and students and expenditures on services provided on a collective basis. Primary education includes the administration, inspection, operation, or support of schools and other institutions providing primary education at ISCED-97 level 1. It also includes literacy programs for students too old for primary school. For FY21, MCC will use the most recent UNESCO data from 2014 or later.

## MCC Methodology

**MCC uses the most recent data point in the past six years (since 2014) <sup>36</sup>**

This indicator measures public expenditure on primary education as a percent of GDP. MCC relies on the United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute of Statistics as its source. Specifically, MCC uses the indicator named “Government expenditure on primary education as a percentage of GDP (%).” For FY21, MCC first determines if a country has a value reported by UNESCO in 2014 or later. If so, the most recent data available within those years are used. If a country does not have UNESCO data at any point since 2014, it does not receive an FY21 score.

For UNESCO data, the GDP estimates used in the denominator are provided to UNESCO by the World Bank. As better data become available, UNESCO makes backward revisions to historical data.

## Girls' Primary Education Completion Rate Indicator

This indicator measures a government's commitment to basic education for girls in terms of access, enrollment, and retention. MCC uses this indicator for countries with a GNI per capita below \$1,945 only.

## Relationship to Growth and Poverty Reduction

Universal basic education is an important determinant of economic growth and poverty reduction.

Empirical research consistently shows a strong positive correlation between girls' primary education and accelerated economic growth, slower population growth, higher wages, increased agricultural yields and labor productivity, and greater returns to schooling as compared to men.<sup>37</sup> A large body of literature also shows that increasing a mother's schooling has a large effect on her child's health, schooling, and adult productivity, an effect that is more pronounced in poor households.<sup>38</sup> By one estimate, providing girls one extra year of education beyond the average can boost eventual wages by 10-20 percent.<sup>39</sup> The social benefits of female education are also demonstrated through lower fertility rates, higher immunization rates, decreased child and maternal mortality, reduced transmission of HIV, fewer cases of domestic violence, greater educational achievement by children, and increased female participation in government.<sup>40</sup>

## Source

UNESCO's Institute for Statistics (UIS), <http://www.uis.unesco.org>. Questions regarding this indicator may be directed to [survey@uis.unesco.org](mailto:survey@uis.unesco.org) or +1 (514) 343-7752.

## Indicator Institution Methodology

The Girls' Primary Education Completion Rate indicator is measured as the gross intake ratio into the last grade of primary, a proxy for primary completion. This is measured as the total number of female students enrolled in the last grade of primary (regardless of age), minus the number of female students repeating the last grade of primary, divided by the total female population of the standard entrance age of the last grade of primary. The primary completion rate reflects the primary cycle as defined by the International Standard Classification of Education (ISCED), ranging from three or four years of primary education (in a very small number of countries) to five or six years (in most countries), to seven years (in a small number of countries). For the countries that changed their primary cycle, the most recent ISCED primary cycle is applied consistently to the whole series. For FY21, MCC will use the most recent UNESCO data since 2014.

This indicator was selected since data limitations preclude adjusting the girls' primary education completion rate for students who drop out during the final year of primary school. Therefore, UNESCO's estimates should be taken as an upper-bound estimate of the actual female primary completion rate. Because the numerator may include late entrants and over-age children who have repeated one or more grades of primary school but are now graduating, as well as children who entered school early, it is possible for the primary completion rate to exceed 100 percent.

## MCC Methodology

*MCC uses the most recent data point in the past six years (since 2014)*<sup>41</sup>

MCC draws upon data from UNESCO's Institute of Statistics as its exclusive source of data for this indicator. Specifically, MCC uses the indicator named "Gross intake ratio to the last grade of primary education, female (%)." To receive an FY21 score, countries must have a UNESCO value in 2014 or later.

MCC uses the most recent year available, that is, MCC uses the most recent data from the past six years. If a country does not have UNESCO data at any point from 2014 or later, it does not receive an FY21 score. As better data become available, UNESCO makes backward revisions to its historical data.

## Girls' Secondary Education Enrollment Ratio Indicator

This indicator measures a government's commitment to secondary education for girls in terms of access, enrollment, and retention. MCC uses this indicator for countries with a GNI per capita between \$1,946 and \$4,045 only.

### Relationship to Growth and Poverty Reduction

Access to continued education beyond the primary level solidifies the benefits associated with girls' primary education. Secondary education for girls ensures they receive both the benefits of primary education and the additional benefits linked to further education. Empirical research consistently shows a strong positive correlation between girls' secondary education and faster economic growth, higher wages for women, slower population growth, and increased labor productivity.<sup>42</sup> According to one estimate, a 1 percent increase in proportion of women enrolled in secondary school will generate a 0.3 percent growth in annual per-capita income.<sup>43</sup> A large body of literature also shows that increasing a mother's schooling has large effect on her children's health, schooling, and adult productivity.<sup>44</sup> The social benefits of female education are also demonstrated through postponed marriage and pregnancy, lower fertility rates, decreased child and maternal mortality, reduced transmission of HIV, and greater educational achievement by children.<sup>45</sup>

### Source

UNESCO's Institute for Statistics (UIS), <http://www.uis.unesco.org>. Questions regarding this indicator may be directed to [survey@uis.unesco.org](mailto:survey@uis.unesco.org) or +1 (514) 343-7752.

### Indicator Institution Methodology

The Girls' Secondary Education Enrollment Ratio indicator measures the number of female pupils enrolled in lower secondary school (regardless of age), expressed as a percentage of the total female population of the standard age of enrolment for lower secondary education. Lower secondary school is defined as a program typically designed to complete the development of basic skills and knowledge which began at the primary level. In many countries, the educational aim is to lay the foundation for lifelong learning and individual development. The programs at this level are usually on a subject-oriented pattern, requiring specialized teachers for each subject area. The end of this level often coincides with the end of compulsory education. For FY21, MCC will use the most recent UNESCO data from 2014 or later.

### MCC Methodology

### **MCC uses the most recent data point in the past six years**

MCC draws upon data from UNESCO's Institute of Statistics as its exclusive source of data. Specifically, MCC uses the indicator named "Gross enrolment ratio, lower secondary, female (%)." To receive an FY21 score, countries must have a UNESCO value on "gross enrolment ratio, lower secondary (female)" from 2014 or later. MCC uses the most recent year available that is, MCC uses the most recent data from the past six years. If a country does not have UNESCO data at any point from 2014 or later, it does not receive an FY21 score. As better data become available, UNESCO makes backward revisions to its historical data.

The Girls' Secondary Education Enrollment Ratio indicator measures the number of female pupils enrolled in lower secondary school (regardless of age), expressed as a percentage of the total female population of the standard age of enrolment for lower secondary education. Lower secondary school is defined as a program typically designed to complete the development of basic skills and knowledge which began at the primary level. Because the numerator may include late entrants and over-age children, as well as children who entered school early, it is possible for the secondary enrollment rate to exceed 100 percent.

## **Child Health Indicator**

This composite indicator measures a government's commitment to child health as measured by child mortality, the sound management of water resources and water systems, and proper sewage disposal and sanitary control.

### **Relationship to Growth and Poverty Reduction**

Improving child health leads to a more productive and healthier workforce both presently and in the future. Inadequate water and sanitation is the second leading cause of child mortality; it kills more young children than AIDS, malaria, and measles combined.<sup>46</sup> Improved sanitation and increased access to water have numerous economic benefits, including productivity savings in the form of fewer missed days of work or school due to illness from unclean water; the economic contribution of the lives saved from diarrheal disease; decreasing treatment expenditures for diarrheal disease at both the individual and government levels and time savings related to searching for facilities and water collection that would increase time for income-earning work.<sup>47</sup> Vulnerable groups, such as women, children, handicapped individuals and the very poor, are particularly affected by inadequate sanitation and water quality, meaning that improvement in these areas would help these groups the most.<sup>48</sup> In children in particular, improved sanitation and water quality have been found to improve learning outcomes due to alleviating the burden of illness and helminthes (parasites) on cognitive development.<sup>49</sup>

### **Source**

Columbia University's Center for International Earth Science Information Network (CIESIN) and the Yale Center for Environmental Law and Policy (YCELP), <http://sedac.ciesin.columbia.edu/es/mcc.html>.

Questions regarding this indicator may be directed to [ciesin.info@ciesin.columbia.edu](mailto:ciesin.info@ciesin.columbia.edu) or +1 (845) 365-8988.

## Indicator Institution Methodology

This index is calculated as the average of three, equally weighted indicators:

- **Access to Improved Sanitation:** Produced by the World Health Organization (WHO) and the United Nations Children’s Fund (UNICEF), this indicator measures the percentage of the population with access to facilities that hygienically separate human excreta from human, animal, and insect contact. Facilities such as sewers or septic tanks, pour-flush latrines and simple pit or ventilated improved pit latrines are assumed to be adequate, provided that they are not public and not shared with other households.
- **Access to Improved Water:** Produced by WHO and UNICEF, this indicator measures the percentage of the population with access to at least 20 liters of water per person per day from an “improved” source (household connections, public standpipes, boreholes, protected dug wells, protected springs, and rainwater collection) within one kilometer of the user’s dwelling and with collection times of no more than 30 minutes.
- **Child Mortality (Ages 1-4):** Produced by the United Nations Inter-agency Group for Child Mortality Estimation (IGME), this indicator measures the probability of dying between ages 1 and 4.

## MCC Methodology

**CIESIN/YCELP’s Child Health Score = [ 0.33 x Child Mortality ] + [ 0.33 x Access to Water ] + [ 0.33 x Access to Sanitation ]**

In creating the index used for the FY21 data, Columbia University’s Center for International Earth Science Information Network (CIESIN) and the Yale Center for Environmental Law and Policy (YCELP) relied on the most recent child mortality data ages 1-4 (4q1), water access data, and sanitation access data. If no updates from the most recent year were available, previous data were applied. Each of the three components (child mortality, access to water, and access to sanitation) is equally weighted (33.3%) in the overall index. Country scores are reported as 2019 data on the FY21 MCC Country Scorecards. As better data become available, CIESIN and YCELP make backward revisions to historical data. In FY20, CIESIN changed its source of Child Mortality data from the UN Population Division’s World Population Prospects (WPP data) to the United Nations Inter-agency Group for Child Mortality Estimation (IGME data) since IGME updates its data more frequently than WPP. As such, some variation in Child Health data before FY20 could be attributed to the new underlying data source.

## Natural Resource Protection

This indicator measures a government’s commitment to habitat preservation and biodiversity protection.

## Relationship to Growth and Poverty Reduction

Environmental protection of biomes and the biodiversity and ecosystems within those biomes supports long-term economic growth by providing essential ecosystem goods and services such as natural capital, fertile soil, climate regulation, clean air and water, renewable energy, and genetic diversity.<sup>50</sup> The appropriate management of ecosystems and the natural resources within those ecosystems promotes agricultural and non-agricultural productivity.<sup>51</sup> Some research suggests that economic growth will be increasingly difficult to sustain as the current population compromises or decimates the biomes that provide the natural resources that are essential to future development or sustenance.<sup>52</sup> Those in poverty, particularly subsistence farmers and those in rural areas, are most likely to be exposed to and affected by environmental degradation and biodiversity loss because they rely so directly on ecosystem services for their food security and livelihood.<sup>53</sup>

## Source

Columbia University's Center for International Earth Science Information Network (CIESIN) and the Yale Center for Environmental Law and Policy (YCELP), <http://sedac.ciesin.columbia.edu/es/mcc.html>. Questions regarding this indicator may be directed to [ciesin.info@ciesin.columbia.edu](mailto:ciesin.info@ciesin.columbia.edu) or +1 (845) 365-8988.

## Indicator Institution Methodology

Developed by CIESIN, this indicator assesses whether a country is protecting at least 17% of all of its biomes (e.g. deserts, forests, grasslands, aquatic, and tundra). It is designed to capture the comprehensiveness of a government's commitment to habitat preservation and biodiversity protection. The World Wildlife Fund provides the underlying biome data, and the United Nations Environment Program World Conservation Monitoring Center — in partnership with the International Union for Conservation of Nature (IUCN) World Commission on Protected Areas and the World Database on Protected Areas Consortium — provides the underlying data on protected areas.

## MCC Methodology

In creating the indicator used for the FY21 data, Columbia University's Center for International Earth Science Information Network (CIESIN) and the Yale Center for Environmental Law and Policy (YCELP) relied on 2020 eco-region protection data from United Nations Environment Programme-World Conservation Monitoring Center. As better data become available, CIESIN and YCELP make backward revisions to historical data.

## Encouraging Economic Freedom Category

The eight indicators in this category measure the extent to which a government encourages economic freedom by assessing, among other things, a country's demonstrated commitment to economic policies that: encourage individuals and firms to participate in global trade and international capital markets,

promote private sector growth, protect private property rights, and strengthen market forces in the economy.

## Regulatory Quality Indicator

This indicator measures the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

Countries are evaluated on the following factors:

- prevalence of regulations and administrative requirements that impose a burden on business; ease of starting and closing a new business; ease of registering property;
- government intervention in the economy; the extent to which government subsidies keep uncompetitive industries alive;
- labor market policies; employment law provides for flexibility in hiring and firing; wage and price controls;
- the complexity and efficiency of the tax system; pro-investment tax policies;
- trade policy; the height of tariffs barriers; the number of tariff bands; the stability of tariff rates; the extent to which non-tariff barriers are used; the transparency and predictability of the trade regime;
- investment attractiveness; prevalence of bans or investment licensing requirements; financial regulations on foreign investment and capital; legal restrictions on ownership of business and equity by non-residents; foreign currency regulations; general uncertainty about regulation costs; legal regulation of financial institutions; the extent to which exchange rate policy hinders firm competitiveness;
- extensiveness of legal rules and effectiveness of legal regulations in the banking and securities sectors; costs of uncertain rules, laws, or government policies;
- the strength of the banking system; existence of barriers to entry in the banking sector; ease of access to capital markets; protection of domestic banks from foreign competition; whether interest rates are heavily-regulated; transfer costs associated with exporting capital;
- participation of the private sector in infrastructure projects; dominance of state-owned enterprises; openness of public sector contracts to foreign investors; the extent of market competition; effectiveness of competition and anti-trust policies and legislation;
- the existence of a policy, legal, and institutional framework that supports the development of a commercially-based, market-driven rural finance sector that is efficient, equitable, and accessible to low-income populations in rural areas;
- the adoption of an appropriate policy, legal, and regulatory framework to support the emergence and development of an efficient private rural business sector; the establishment of simple, fast and transparent procedures for establishing private agri-businesses;
- the existence of a policy, legal, and institutional framework that supports the development and liberalization of commercially-based agricultural markets (for inputs and produce) that operate in a liberalized and private sector-led, functionally efficient and equitable manner, and that are accessible to small farmers; and
- the extent to which:
  - corporate governance laws encourage ownership and financial disclosure and protect shareholder rights, and are generally enforced;
  - state intervention in the goods and land market is generally limited to regulation and/or



- legislation to smooth out market imperfections;
- the customs service is free of corruption, operates transparently, relies on risk management, processes duty collections, and refunds promptly; and
- trade laws, regulations, and guidelines are published, simplified, and rationalized.

## Relationship to Growth and Poverty Reduction

Improved regulatory quality can promote economic growth by creating effective and efficient incentives for the private sector. Conversely, burdensome regulations have a negative impact on economic performance through economic waste and decreased productivity.<sup>54</sup> Researchers at the International Finance Corporation argue that “improving from the worst ... to the best ... quartile of business regulations implies a 2.3 percentage point increase in average annual growth.”<sup>55</sup> Good regulatory policies help the poor by creating opportunities for entrepreneurship, reducing opportunities for corruption, increasing the quality of public services, and improving the functioning of the housing, service, and labor markets on which they rely.<sup>56</sup>

## Source

Worldwide Governance Indicators (WGI) from the World Bank/Brookings Institution, <http://info.worldbank.org/governance/wgi/>. Questions regarding this indicator may be directed to [wgi@worldbank.org](mailto:wgi@worldbank.org) or +1 (202) 473-4557.

## Indicator Institution Methodology

This indicator is an index combining a subset of 14 different assessments and surveys, depending on availability, each of which receives a different weight, depending on its estimated precision and country coverage. The Regulatory Quality indicator draws on data, as applicable, from the *Country Policy and Institutional Assessments* of the World Bank, the African Development Bank and the Asian Development Bank, the World Bank’s *Business Environment and Enterprise Performance Survey*, Bertelsmann Foundation’s *Bertelsmann Transformation Index*, Global Insight’s *Business Conditions and Risk Indicators*, the Economist Intelligence Unit’s *Country Risk Service*, the World Economic Forum’s *Global Competitiveness Report*, the Heritage Foundation’s *Index of Economic Freedom*, the International Fund for Agricultural Development’s *Rural Sector Performance Assessments*, the French Government’s *Institutional Profiles Database*, Political Risk Service’s *International Country Risk Guide*, the Institute for Management and Development’s *World Competitiveness Yearbook*, and the World Justice Project’s *Rule of Law Index*.

## MCC Methodology

**MCC Normalized Score = WGI Score – median score**

For ease of interpretation, MCC has adjusted the median for each of the two scorecard income pools to zero for all of the Worldwide Governance Indicators. Country scores are calculated by taking the difference between actual scores and the median. For example, in FY20 the unadjusted median for the

scorecard category of countries with a Gross National Income (GNI) per capita between \$1,926 and \$3,995 on Control of Corruption was -0.52 (note, in FY21, the GNI per capita range for this scorecard category is \$1,946 to \$4,045). In order to set the median at zero, we simply add 0.52 to each country's score (the same thing as subtracting a negative 0.52). Therefore, as an example, Angola's FY20 Control of Corruption score, which was originally -1.14, was adjusted to -0.63.

The FY21 scores come from the 2020 update of the Worldwide Governance Indicators dataset and largely reflect performance in calendar year 2019. Since the release of the 2006 update of the Worldwide Governance Indicators, the indicators are updated annually. Each year, the World Bank and Brookings Institution also make minor backward revisions to the historical data. Prior to 2006, the World Bank released data every two years (1996, 1998, 2000, 2002 and 2004). With the 2006 release, the World Bank moved to an annual reporting cycle and provided additional historical data for 2003 and 2005.

## Land Rights and Access Indicator

This indicator evaluates whether and to what extent governments are investing in secure land tenure.

### Relationship to Growth and Poverty Reduction

Secure land tenure plays a central role in the economic growth process by giving people long-term incentives to invest and save their income, enhancing access to essential public services, allowing for more productive use of time and money than protecting land rights, facilitating use of land as collateral for loans, and contributing to social stability and local governance.<sup>57</sup> Improvements in tenure security also favor growth that is “pro-poor” because the benefits generally accrue to those who have not possessed such rights in the past and those who are affected most by high property registration costs.<sup>58</sup> Land policy reform can be particularly meaningful for women: research shows that when women have secure access to land and are able to exercise control over land assets, their ability to earn income is enhanced, household spending on healthcare, nutritious foods, and children's education increases, and human capital accumulation occurs at a faster rate. Women's ability to inherit and possess control rights to land also serves as a crucial social safety net.<sup>59</sup>

### Source

International Fund for Agricultural Development (IFAD), <http://www.ifad.org>, and International Finance Corporation (IFC), <http://www.doingbusiness.org>. Questions regarding the IFAD indicator may be directed to +39 06 545 92377. Questions regarding the IFC indicators may be directed to [doingbusiness@worldbank.org](mailto:doingbusiness@worldbank.org) or +1 (202) 473-5758.

### Indicator Institution Methodology

This composite indicator is calculated as the weighted average of three indicators. Access to Land is weighted 50% and Days and Cost to Register Property are each weighted 25%.

- *Access to Land*: Produced by IFAD, this indicator assesses the extent to which the institutional, legal, and market framework provides secure land tenure and equitable access to land in rural areas. It is made up of five subcomponents: (1) the extent to which the law guarantees secure tenure for land rights of the poor; (2) the extent to which the law guarantees secure land rights for women and other vulnerable groups; (3) the extent to which land is titled and registered; (4) the functioning of land markets; and (5) the extent to which government policies contribute to the sustainable management of common property resources. IFAD's operational staff base their assessments on a questionnaire and guideposts identifying the basis of each scoring level, available at <https://webapps.ifad.org/members/gc/42/docs/GC-42-L-6.pdf> or <https://webapps.ifad.org/members/eb/125/docs/EB-2018-125-R-4-Add-1.pdf>. Past datasets can be found in the documents of IFAD's governing council <https://webapps.ifad.org/members/gc>.
- *Days to Register Property*: Produced by the IFC, this indicator measures how long it takes to register property in a periurban zone. The IFC records the full amount of time necessary when a business purchases land and a building to transfer the property title from the seller to the buyer so that the buyer can use the title for expanding business, as collateral in taking new loans, or, if necessary, to sell to another business.
- *Cost of Registering Property*: Produced by the IFC, this indicator measures the cost to register property in a periurban zone as a percentage of the value of the property. The IFC records all of the costs that are incurred when a business purchases land and a building to transfer the property title from the seller to the buyer, so that the buyer can use it for expanding his business, as collateral in taking new loans, or, if necessary, to sell it to another business.

To calculate the Days and Cost of Registering a Property indicators, local property lawyers, notaries and property registries provide information on procedures as well as the time and cost to complete each of them. To make the data comparable across countries, several assumptions about the parties to the transaction, the property and the procedures are used.

The parties (buyer and seller):

- Are limited liability companies.
- Are located in the periurban area of the country's most populous city.
- Are 100% domestically and privately owned.
- Have 50 employees each, all of whom are nationals.
- Perform general commercial activities.

The property:

- Has a value of 50 times income per capita. The sale price equals the value.
- Is fully owned by the seller.
- Has no mortgages attached and has been under the same ownership for the past 10 years.
- Is registered in the land registry or cadastre, or both, and is free of title disputes.
- Is located in a periurban commercial zone, and no rezoning is required.
- Consists of land and a building. The land area is 557.4 square meters (6,000 square feet). A 2-story warehouse of 929 square meters (10,000 square feet) is located on the land. The warehouse is 10 years old, is in good condition and complies with all safety standards, building codes and other legal requirements. The property of land and building will be transferred in its entirety.
- Will not be subject to renovations or additional building following the purchase.

- Has no trees, natural water sources, natural reserves or historical monuments of any kind.
- Will not be used for special purposes, and no special permits, such as for residential use, industrial plants, waste storage or certain types of agricultural activities, are required.
- Has no occupants (legal or illegal), and no other party holds a legal interest in it.

## MCC Aggregation Methodology

**MCC's Land Rights and Access Score = [ 0.5 x Normalized IFAD ] + [ 0.25 x (Normalized World Bank Time) ] + [ 0.25 x (Normalized World Bank Cost) ]**

This index draws on 2018 “Access to Land” data from the International Fund for Agricultural Development (IFAD) and 2021 data from the World Bank on the time and cost of property registration. Country scores are reported on the Scorecards as 2021 data. When IFAD data from the current year is missing, data from the most recent year is used going back until 2014. If a country does not have IFAD data for any year from 2014-2018, the indicator is considered missing.

Countries that received a “no practice” score on the World Bank’s Time to Register Property indicator were assigned the maximum observed value (i.e. the worst possible score) plus one additional day. Countries that received a “no practice” score on the Cost of Registering Property indicator were assigned the maximum observed value (i.e. the worst possible score) plus one additional percentage point of the property value.<sup>60</sup>

Since each of the three sub-components of this index have different scales, MCC created a common scale for each of the indicators by normalizing them. Please see equations below. Due to the fact that high scores on the World Bank indicators represent low levels of performance and high scores on the IFAD indicator represents high levels of performance, it was also necessary to invert either the IFAD normalized scale or the World Bank normalized scales. MCC chose to invert the IFAD scale by subtracting each country’s normalized value from 1.

## MCC Methodology to Normalize IFAD and World Bank Data:

- **Normalized IFAD = 1 – (Maximum observed value – Country X’s raw score) ÷ (Maximum observed value -Minimum observed value)**
- **Normalized Days (or Cost) to Register a Property = (Maximum observed value – Country X’s raw score) ÷ (Maximum observed value -Minimum observed value)**

For example, to calculate Moldova’s FY20 normalized score on the World Bank Days to Register Property indicator, we would first subtract the maximum observed value (513) from Moldova’s raw score (5.5). We would then divide the difference between those two numbers (507.5) by the difference between the maximum observed value (513) and the minimum observed value (1). This yields a normalized “days to register property” score of 0.991. After each of the three sub-components was transformed into a common scale, MCC calculated the Land Rights and Access Index using the following formula:

**MCC's Land Rights and Access Score = [ 0.5 x Normalized IFAD ] + [ 0.25 x (Normalized World Bank**

Time) ] + [ 0.25 x (Normalized World Bank Cost) ]

As an example, for FY20 in Moldova's case, its normalized 2018 IFAD score (1) is given a 50% weight, its 2020 World Bank Time to Register Property score is given a 25% weight (0.9912), and its 2020 World Bank Cost of Registering Property score (0.9643) is given a 25% weight. This yields a Land Rights and Access index value of 0.989.

FY21 data on the time and cost of registering property are drawn from the 2020 data in the World Bank's *Doing Business 2020* Report. FY21 index values also rely upon the most recent year available from IFAD's "Access to Land" data. To match these two datasets, two procedures are performed. First, if IFAD data for a given year is missing, the most recent year of available data is used. Then each year of IFAD data is matched to a World Bank Data labeled as being one year in the future. So, if a country has IFAD data for 2015 but not 2016, the 2015 IFAD data is matched with the 2016 World Bank data and listed on the scorecard as 2015 data. The 2015 IFAD data is used in place of the missing 2016 data and then matched with the 2017 World Bank data and listed on the scorecard as 2016 data. As better data become available, the World Bank makes backward revisions to its historical data. No value is assigned if data from one source exists for a given year, but data from the other source exists only for years after the year of interest.

In 2015, The World Bank's *Doing Business Report* added a second city of analysis for Bangladesh, Brazil, China, India, Indonesia, Japan, Mexico, Nigeria, Pakistan, Russia, and the United States. As a result, these countries scores for 2014 and 2015 (displayed as 2013 and 2014 on the MCC scorecard) are an average across two cities. Due to this change, these countries data for 2014 and 2015 are not comparable to previous year's data.

On August 27, 2020, the World Bank announced it had discovered irregularities in previously reported Doing Business data that are inconsistent with the Doing Business methodology. Initial reports indicate that the irregularities center on countries not in MCC's candidate pool and that do not receive an MCC scorecard. Visit MCC's website at [www.mcc.gov/db-fy21](http://www.mcc.gov/db-fy21) to learn more about how MCC uses the Doing Business data and considerations for this year.

## Access to Credit Indicator

This indicator measures the depth of available credit information and the effectiveness of collateral and bankruptcy laws in facilitating lending.

## Relationship to Growth and Poverty Reduction

The ability to access affordable credit is a critical element of private sector led growth, particularly for small businesses that often lack the initial capital needed to grow and expand and also for agricultural households, where expenditures on inputs precede the returns from harvest; it also increases a business or household's ability to bear and cope with risk.<sup>61</sup> Visible credit information registries are vital because with credit information sharing, lenders are more aware of borrowers' capacity and ability to repay their loans, which can significantly decrease default rates, lowering the perceived risk of lending and cost of capital;

the registries can also lead to greater inclusiveness of low-income borrowers due to efficiency gains on the part of the lenders via the lowered default rates.<sup>62</sup> Additionally, collateral laws that permit a broad definition of collateral help to eliminate “dead capital,” which can help reduce interest rates and encourage greater loan volumes.<sup>63</sup>

## Source

International Finance Corporation (IFC), <http://www.doingbusiness.org>. Questions regarding this indicator may be directed to [doingbusiness@worldbank.org](mailto:doingbusiness@worldbank.org) or +1 (202) 473-5758.

## Indicator Institution Methodology

The Access to Credit composite indicator is calculated by taking the simple average of two IFC indicators, which have been normalized and ranked on equivalent scales:

- *Depth of Information:* The depth of credit information index measures rules and practices affecting the coverage, scope and accessibility of credit information available through either a public credit registry or a private credit bureau. A score of 1 is assigned for each of the following 8 features of the public credit registry or private credit bureau (or both):
  - Both positive credit information (for example, outstanding loan amounts and pattern of on-time repayments) and negative information (for example, late payments, number and amount of defaults and bankruptcies) are distributed.
  - Data on both firms and individuals are distributed.
  - Data from retailers and utility companies as well as financial institutions are distributed.
  - More than 2 years of historical data are distributed. Credit registries and bureaus that erase data on defaults as soon as they are repaid obtain a score of 0 for this indicator.
  - Data on loan amounts below 1% of income per capita are distributed. Note that a credit registry or bureau must have a minimum coverage of 1% of the adult population to score a 1 on this indicator.
  - By law, borrowers have the right to access their data in the largest credit registry or bureau in the economy.
  - Can banks and financial institutions access the credit information online?
  - Does the credit information system provide credit score and make it available to all service subscribers?

The index ranges from 0 to 8, with higher values indicating the availability of more credit information, from either a public credit registry or a private credit bureau, to facilitate lending decisions. If the credit registry or bureau is not operational or has coverage of less than 0.1% of the adult population, the score on the depth of credit information index is 0.

- *Strength of Legal Rights:* This component measures the extent to which bankruptcy and collateral laws protect the rights of borrowers and lenders to facilitate lending. It contains 12 aspects related to legal rights in collateral law or bankruptcy law. A score of 1 is assigned for each of the following features of the laws:
  - Any business may use movable assets as collateral while keeping possession of the assets, and any financial institution may accept such assets as collateral.

- The law allows a business to grant a nonpossessory security right in a single category of movable assets (such as accounts receivable or inventory), without requiring a specific description of the collateral.
- The law allows a business to grant a nonpossessory security right in substantially all its movable assets, without requiring a specific description of the collateral.
- A security right may extend to future or after-acquired assets and may extend automatically to the products, proceeds or replacements of the original assets.
- A general description of debts and obligations is permitted in the collateral agreements and in registration documents: all types of debts and obligations can be secured between the parties, and the collateral agreement can include a maximum amount for which the assets are encumbered.
- A collateral registry or registration institution is in operation, unified geographically and by asset type, with an electronic database indexed by debtors' names.
- Secured creditors are paid first (for example, before general tax claims and employee claims) when a debtor defaults outside an insolvency procedure.
- Secured creditors are paid first (for example, before general tax claims and employee claims) when a business is liquidated.
- Secured creditors are not subject to an automatic stay or moratorium on enforcement procedures when a debtor enters a court-supervised reorganization procedure.
- The law allows parties to agree in a collateral agreement that the lender may enforce its security right out of court.
- Does the economy have an integrated/unified legal framework for secured transactions?
- Is the collateral registry a notice based registry? Does the collateral registry count with modern features (such as an online search?)

The index ranges from 0 to 12, with higher scores indicating that collateral and bankruptcy laws are better designed to expand access to credit.

## MCC Methodology

$$\text{MCC's Access to Credit Score} = [ 12 \times (\text{Depth of Credit}) + 8 \times (\text{Strength of Legal Rights}) ] / 2$$

In order to give equal weight to each index, MCC multiplies the Depth of Credit Information score by 12 and the Strength of Legal Rights score by 8 and then takes the average.

FY21 data refer to the 2020 values reported in the World Bank's *Doing Business 2020* report and are labeled as 2019 on the scorecard as the data were collected in 2019.

In the 2015 Doing Business Report, the World Bank made a number of methodological changes to the Access to Credit sub-indicators, including adding new and more challenging standards for a number of the sub-indicators. The World Bank therefore revised a number of countries' scores in accordance to the new standards. These revised scores were applied to the 2015 and 2014 data (reflected on MCC's scorecard as 2014 and 2013 data) but not to previous years. As a result, data from prior to 2014 is not comparable to data after 2014.

On August 27, 2020, the World Bank announced it had discovered irregularities in previously reported



Doing Business data that are inconsistent with the Doing Business methodology. Initial reports indicate that the irregularities center on countries not in MCC's candidate pool and that do not receive an MCC scorecard. Visit MCC's website at [www.mcc.gov/db-fy21](http://www.mcc.gov/db-fy21) to learn more about how MCC uses the Doing Business data and considerations for this year.

## Business Start-Up Indicator

This indicator measures the time and cost of complying with all procedures officially required for an entrepreneur to start up and formally operate an industrial or commercial business.

### Relationship to Growth and Poverty Reduction

The ability to start a business is important for encouraging entrepreneurship and economic growth.<sup>64</sup> Easing business entry into the formal economy can reduce unemployment, encourage investment, expand the tax base, help small entrepreneurs to access bank credit, allow workers to enjoy health insurance and pension benefits, and enable businesses to achieve economies of scale.<sup>65</sup> Research shows that formally registered businesses grow to more efficient sizes because they do not operate in fear of the authorities.<sup>66</sup> The International Finance Corporation has found that business start-up reforms “can add between a quarter and a half a percentage point to growth rates in the average developing economy.”<sup>67</sup> Cost-related barriers to starting a business are particularly regressive in that they deny economic opportunities to the poor due to their low levels of liquid capital.<sup>68</sup>

### Source

International Finance Corporation (IFC), <http://www.doingbusiness.org>. Questions regarding this indicator may be directed to [doingbusiness@worldbank.org](mailto:doingbusiness@worldbank.org) or +1 (202) 473-5758.

### Indicator Institution Methodology

The Business Start-Up composite indicator is calculated as the average of two indicators:

- *Days to Start a Business*: This component measures the number of calendar days it takes to comply with all procedures that are officially required for an entrepreneur to start up and formally operate an industrial or commercial business. These include obtaining all necessary licenses and permits and completing any required notifications, verifications or inscriptions for the company and employees with relevant authorities.
- *Cost of Starting a Business*: This component measures the cost of starting a business as a percentage of country's per capita income. The IFC records all procedures that are officially required for an entrepreneur to start up and formally operate an industrial or commercial business. These include obtaining all necessary licenses and permits and completing any required notifications, verifications or inscriptions for the company and employees with relevant authorities.



Local lawyers and other professionals examine specific regulations that impact the time and cost of opening a new business. The local lawyers and/or other professionals are instructed to record all generic procedures that are officially required for entrepreneur to start up an industrial or commercial business. These include obtaining all necessary licenses and permits and completing any required notifications, verifications or inscriptions with relevant authorities. After a study of laws, regulations and publicly available information on business entry, a detailed list of procedures, time, cost and paid-in minimum capital requirements is developed. Subsequently, local incorporation lawyers and government officials complete and verify the data on applicable procedures, the time and cost of complying with each procedure under normal circumstances and the paid-in minimum capital. On average four law firms participate in each country. Information is also collected on the sequence in which procedures are to be completed and whether procedures may be carried out simultaneously. It is assumed that any required information is readily available and that all government and non-government agencies involved in the start-up process function efficiently and without corruption. If answers by local experts differ, inquiries continue until the data are reconciled.

Two types of businesses are considered under the methodology. They are identical in all aspects, except that one company is owned by five married women and other by five married men. To make the data comparable across countries, several assumptions about the businesses and the procedures are used. The business:

- is a limited liability company; if there is more than one type of limited liability company in the country, the most popular limited liability form among domestic firms is chosen. Information on the most popular form is obtained from incorporation lawyers or the statistical office;
- operates in the economy's largest business city. For 11 economies, the data are also collected for the second largest business city. In these instances, MCC utilizes the simple average of the two cities, as computed by IFC;
- is 100% domestically owned and has five owners, none of whom is a legal entity;
- has start-up capital of 10 times income per capita, paid in cash;
- performs general industrial or commercial activities, such as the production or sale of products or services to the public; it does not perform foreign trade activities and does not handle products subject to a special tax regime, for example, liquor or tobacco; the business is not using heavily polluting production processes;
- leases the commercial plant and offices and is not a proprietor of real estate;
- does not qualify for investment incentives or any special benefits;
- has at least 10 and up to 50 employees one month after the commencement of operations, all of them nationals;
- has a turnover at least 100 times income per capita; and
- has a company deed 10 pages long.

It is assumed that the minimum time required per procedure is one calendar day. Time captures the median duration that incorporation lawyers indicate is necessary to complete a procedure. Although procedures may take place simultaneously, they cannot start on the same day (that is, simultaneous procedures start on consecutive days). A procedure is considered completed once the company has received the final document, such as the company registration certificate or tax number. If a procedure

can be accelerated for an additional cost, the fastest procedure is chosen. It is assumed that the entrepreneur does not waste time and commits to completing each remaining procedure without delay. The time that the entrepreneur spends on gathering information is ignored. It is assumed that the entrepreneur is aware of all entry regulations and their sequence from the beginning.

The text of the company law, the commercial code and specific regulations and fee schedules are used as sources for calculating the cost of start-up. If there are conflicting sources and the laws are not clear, the most authoritative source is used. The constitution supersedes the company law, and the law prevails over regulations and decrees. If conflicting sources are of the same rank, the source indicating the most costly procedure is used, since an entrepreneur never second-guesses a government official. In the absence of fee schedules, a government officer's estimate is taken as an official source. In the absence of a government officer's estimate, estimates of incorporation lawyers are used. If several incorporation lawyers provide different estimates, the median reported value is applied. In all cases the cost excludes bribes.

## MCC Methodology

*MCC's Business Start-up Score = [ 0.5 x (Normalized Days to Start a Business) ] + [ 0.5 x (Normalized Cost to Start a Business) ]*

The Business Start-Up index is calculated as the average of two indicators from the World Bank's *Doing Business* survey: Days to Start a Business and Cost to Start a Business. Since the two sub-components of the Business Start-Up index have different scales, MCC normalizes the indicators to create a common scale for each of them.

- *Normalized Days (or Cost) to Start a Business = (Maximum observed value – Country X's raw score) ÷ (Maximum observed value - Minimum observed value)*

For example, in FY20 to calculate Mozambique's normalized score on the Days to Start a Business indicator, we would first subtract Mozambique's raw score (17) from the maximum observed value (230).

<sup>69</sup> We would then divide the difference between those two numbers (213) by the difference between the maximum observed value (230) and the minimum observed value (0.5). This yields a normalized "days to start a business" score of 0.928. After both of the two sub-components were transformed into a common scale, MCC calculated the Business Start-Up Index using the following formula:

- *Business Start-Up = 0.5(World Bank Days to Start a Business) + 0.5(World Bank Cost of Starting a Business)*

In Mozambique's case, its FY20 normalized Days to Start a Business score (0.928) is given a 50% weight and its Cost of Starting a Business score (0.495) is given a 50% weight. This yields a Business Start-Up index value of 0.712 for FY20.

FY21 data refer to the 2020 values reported in the World Bank's *Doing Business 2020* report and are labeled as 2019 on the scorecard. As better data become available, the World Bank makes backward revisions to its historical data.

In 2015, the World Bank's *Doing Business Report* added a second city of analysis for Bangladesh, Brazil, China, India, Indonesia, Japan, Mexico, Nigeria, Pakistan, Russia, and the United States. As a result, these countries scores from 2014 to 2020 (displayed as 2013 to 2019 on the MCC scorecard) are an average across two cities. Due to this change, these countries' data from 2014 to 2020 are not comparable to previous year's data.

In 2017, the World Bank's *Doing Business Report* disaggregated data for both Cost and Days to Start a Business by gender. MCC utilizes the simple average of the disaggregated data to represent scores for every country covered in the report. Because the World Bank historically revised its dataset with gender dis-aggregations, current year data is comparable to previous year's data.

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## Trade Policy Indicator

This indicator measures a country's openness to international trade based on average tariff rates and non-tariff barriers to trade. Countries are rated on the following factors:

- Trade-weighted average tariff rate;
- Non-tariff barriers (NTBs) including, but not limited to: import licenses; trade quotas; production subsidies; anti-dumping, countervailing, and safeguard measures; government procurement procedures; local content requirements; excessive marking and labeling requirements; export assistance; export taxes and tax concessions; and corruption in the customs service.

## Relationship to Growth and Poverty Reduction

Trade openness can help to accelerate long run economic growth by allowing for greater economic specialization, encouraging investment and increasing productivity.<sup>70</sup> Greater international competition can also force domestic firms to be more efficient and reduce rent seeking and corrupt activities.<sup>71</sup> One study estimates that "open" economies on average register 2.2% higher economic growth than "closed" economies.<sup>72</sup> Although the relationship between trade openness and poverty reduction is complex, research suggests trade liberalization can improve the livelihoods and real incomes of the poor through the availability of lower-cost import items, increases in the relative wages of laborers, net increases in tariff revenues as a result of lower rates and higher volume, and insulation of the economy from negative exogenous shocks.<sup>73</sup>

## Source

The Heritage Foundation, <https://www.heritage.org/index/trade-freedom>. Questions regarding this

indicator may be directed to [Anthony.Kim@heritage.org](mailto:Anthony.Kim@heritage.org) or +1 (202) 608-6261.

## Methodology

This indicator relies on the Heritage Foundation's Trade Freedom score which is a component of their annual *Index of Economic Freedom*. The indicator scale ranges from 0 to 100, where 0 represents the highest level of protectionism and 100 represents the lowest level of protectionism. The equation used to convert tariff rates and non-tariff barriers into this 0-100 percent scale is presented below:

$$\text{Trade Policy}_i = (\text{Tariff}_{\max} - \text{Tariff}_i) / (\text{Tariff}_{\max} - \text{Tariff}_{\min}) - \text{NTB}_i$$

Trade Policy<sub>i</sub> represents the trade freedom in country *i*, Tariff<sub>max</sub> and Tariff<sub>min</sub> represent the upper and lower bounds (50 and zero percent respectively), and Tariff<sub>i</sub> represents the weighted average tariff rate in country *i*. The result is multiplied by 100 to convert it to a percentage. If applicable to country *i*, an NTB penalty of 5, 10, 15, or 20 percentage points is then subtracted from the base score, depending on the pervasiveness of NTBs.

In general, the Heritage Foundation uses the most recent data from the World Trade Organization (WTO) on the Most Favored Nation (MFN) trade weighted average duty tariff (weighted by imports from the country's trading partners) from 2013 or later as the tariff score. In the absence of MFN trade weighted average duty tariff data from 2013 or later in the WTO database, a country's most recent MFN simple average duty tariff from the WTO from 2013 or later is used. In the absence of MFN simple average duty tariff from the WTO from 2013 or later, the most recent World Bank applied weighted Tariff rate, is used. In the very few cases where data on duties and customs revenues are not available, the authors rely on measures of international trade taxes. Data on tariffs and NTBs are obtained from the following sources: the World Bank's *World Development Indicators* and *Data on Trade and Import Barriers: Trends in Average Tariff Rates for Developing and Industrial Countries*; the World Trade Organization's *Trade Policy Reviews*; the Office of the U.S. Trade Representative's *National Trade Estimate Report on Foreign Trade Barriers*, the World Bank's *Doing Business* report, the U.S. Department of Commerce's *Country Commercial Guide*, the Economist Intelligence Unit's *Country Reports, Country Profiles*, and *Country Commerce* data, and "official government publications of each country."

## Inflation Indicator

This indicator measures the government's commitment to sound monetary policy.

## Relationship to Growth and Poverty Reduction

Research shows that high levels of inflation are detrimental to long-run growth.<sup>74</sup> High inflation creates an environment of risk and uncertainty, drives down the rate of investment, and is often associated with distorted relative prices and tax incentives.<sup>75</sup> Inflation can also hinder financial market development and create incentives for corruption.<sup>76</sup> In addition, inflation often has a direct negative impact on the poor.

When inflation is associated with swings in relative prices, it usually erodes real wages and distorts consumption decisions.<sup>77</sup>

## Source

IMF World Economic Outlook (WEO) database, <http://www.imf.org/external/ns/cs.aspx?id=28>. Questions regarding this indicator may be directed to IMF country economists. See individual IMF country pages (<http://www.imf.org/external/country/index.htm>) for contact details.

## Methodology

This indicator measures the most recent one-year change in consumer prices. The indicator reflects average annual percentage change for the year, not end-of-period data.

In keeping with economic research findings, MCC considers countries with inflation below 15% to be passing this indicator.

MCC relies exclusively on the IMF's WEO database for inflation data. WEO inflation data reflect annual percentage change averages for the year, not end-of-period data. FY21 data refer to the 2019 inflation rate. As better data become available, the IMF makes backward revisions to its historical data.

## Fiscal Policy Indicator

This indicator measures the government's commitment to prudent fiscal management and private sector growth.

## Relationship to Growth and Poverty Reduction

Unsustainable fiscal deficits can impact economic growth by raising expectations of inflation or exchange rate depreciation.<sup>78</sup> Fiscal deficits driven by current expenditures decrease national savings and put upward pressure on real interest rates, which can lead to a crowding out of private sector activity.<sup>79</sup> In addition, fiscal deficits either force governments to increase tax rates, reducing the capital available for domestic investment, or to increase the stock of public debt.<sup>80</sup> High and growing levels of public debt have also led to financial and macroeconomic instability in many countries.<sup>81</sup> Taken together, these factors decrease labor productivity and wages, thereby increasing poverty.<sup>82</sup>

## Source

The IMF's World Economic Outlook (WEO) database, <http://www.imf.org/external/ns/cs.aspx?id=28>. Questions regarding this indicator may be directed to IMF country economists. See individual IMF country pages (<http://www.imf.org/external/country/index.htm>) for contact details.

## Methodology

This indicator is general government net lending/borrowing as a percent of GDP, averaged over a three-year period. Net lending/borrowing is calculated as revenue minus total expenditure.

$$\text{MCC's Fiscal Policy Score} = (2017 + 2018 + 2019) / 3$$

MCC relies exclusively on the International Monetary Fund's (IMF) World Economic Outlook (WEO) database for Fiscal Policy data. The fiscal policy indicator measures general government net lending/borrowing as a percent of GDP, averaged over a three year period. Net lending / borrowing is calculated as revenue minus total expenditure. The FY21 score averages the annual data of 2017, 2018 and 2019. As better data become available, the IMF makes backward revisions to its historical data.

The IMF published the net lending/borrowing series for the first time in the 2010 WEO database.

## Gender in the Economy Indicator

This indicator measures the government's commitment to promoting gender equality by providing women and men with the same legal ability to access legal and public institutions, own property, go to court, and get a job; and measures the extent to which the law provides girls and women legal protection from violence.

## Relationship to Growth and Poverty Reduction

This indicator draws from six areas of the *Women Business and the Law* (WBL) report: Mobility, Workplace, Pay, Marriage, Entrepreneurship, and Assets. It also draws questions from WBL's additional data including questions from these areas and one additional area around a woman's rights in court. Each of these areas has a clear relationship to growth and poverty reduction:

- *Mobility*: These questions explore women's legal access to physical mobility within a country. Studies show that legally sanctioned gender inequality has a significant negative impact on a country's economic growth, because it prevents a large portion the population from fully participating in the economy, thus lowering the average ability of the workforce.<sup>83</sup>
- *Workplace*: These questions explore specific barriers to women's opportunities in the workplace. Sexual harassment and violence in the workplace can undermine women's economic empowerment by preventing employment and blocking access to other financial resources.<sup>84</sup> Research shows that when women have access to employment, investment in children's health, nutrition, and education often increases, promoting higher levels of human capital.<sup>85</sup>
- *Pay*: These questions look at barriers to women's pay equality. Restrictions on working hours, sectors, and occupations limit the range of jobs that women can hold and this lead to occupational segregation and confinement of women to low-paying sectors and activities.<sup>86</sup> Many jobs prohibited for women are in highly paid industries, which can have implications for their earning potential. Further, when women are excluded from "male" jobs in the formal sector, an

overcrowding can occur in the “female” informal job sector. This leads to a depression of wages for an otherwise productive group of workers.<sup>87</sup> Increasing women’s participation in the workforce alone is insufficient for increased economic growth.<sup>88</sup> Women need access to the same job and pay opportunities in order to have an impact on economic growth.<sup>89</sup>

- *Marriage*: These questions look at women’s equality in marriage including questions on domestic violence, and child marriage. Research shows the earnings of women in formal wage work who are exposed to severe partner violence are significantly lower than women who do not experience such violence.<sup>90</sup> Similarly, due to the typically large age differences between girls younger than 18 and their husbands, child brides lack bargaining power in the marriage and have less say over their activities and choices, including education and economic activity.<sup>91</sup> Child marriage—through reduced decision-making power, greater likelihood of school dropout and illiteracy, lower labor force participation and earnings, and less control over productive household assets—severely impedes the economic opportunities of young women.<sup>92</sup>
- *Entrepreneurship*: This area explores barriers to women’s ability to start businesses. When one gender receives fewer legal rights, both the country’s potential labor force and potential pool of entrepreneurs decreases. Women’s ability to start businesses and create jobs is essential to increase economic growth and alleviate poverty.<sup>93</sup>
- *Assets*: This area analyzes women’s ability to own, control, and inherit property. Owning and having an equal say in their use of property not only increases women’s financial security; it is also associated with their increased bargaining power within the household.<sup>94</sup>
- *Legal*: This area deals with women’s constitutional rights, rights to pass on citizenship, and rights in court. Women’s testimonial parity increases equality before the law and protects them in case of legal challenges to contracts and other matters of economic importance where they must give testimony to prove their case.<sup>95</sup> For many women in rural areas, customary and religious law can override constitutional protections for equality and legal rights.<sup>96</sup> Where these laws can override constitutional protections, all of the other benefits to economic growth and poverty reduction provided by other concepts covered in this indicator are nullified.<sup>97</sup>

## Source

*Women Business and the Law* initiative of the World Bank, <http://wbl.worldbank.org/>. Questions regarding this indicator may be directed to Tea Trumbic at [ttrumbic@worldbank.org](mailto:ttrumbic@worldbank.org).

## Indicator Institution Methodology

The Gender in the Economy indicator utilizes 40 questions from the *Women, Business, and the Law* initiative of the World Bank and assigns points to the response received for a country on each question.

## MCC Methodology

*MCC adds the number of legal restrictions against women on the sub-indicators listed below.* The total number of restrictions (or absence of protections against violence) become the country’s score on MCC’s

scorecard. On this indicator, a lower score is better.

In 2020, WBL changed the wording, layout, and disaggregation of their data slightly. While MCC's Gender in the Economy indicator and its underlying questions have not changed for FY21, there have been minor changes to the construction of the indicator to accommodate WBL's changes. The exact construction of the Gender in the Economy indicator for FY21 is described below.

For FY21, MCC uses questions featured in both WBL's main index and WBL's additional data files, drawing from the most recent year for each data source (2019 for the additional data; 2020 for the main index.) Sub-indicators pulled from the additional data file are marked with a + below.

Sub-indicators marked with a \* below were previously disaggregated between married and unmarried women. In FY21, WBL aggregated most of these data, and noted that restrictions on these sub-indicators usually apply only to married women (the additional data remains disaggregated). WBL published notes in the About tab on this reporting change, as well as two cases in the main data where the restrictions apply to both married and unmarried women. Countries receive ½ point for each of these if they apply only to married or unmarried women; 1 point if they apply to both married and unmarried women.

For other indicators, countries receive 1 point for each question that receives a “no” or “..” as the answer (unless otherwise noted below). Countries do not receive a point for “yes” or “N/A” answers (unless otherwise noted below).

#### Mobility:

1. Can a woman choose where to live in the same way as a man?\*
2. Can a woman travel outside her home in the same way as a man?\*
3. Can a woman travel outside the country in the same way as a man?\*
4. Can a woman obtain a national identity card in the same way as a man?+\*

#### Workplace:

5. Can a woman get a job in the same way as a man?\*
6. Are there criminal penalties for sexual harassment in employment? (Note: MCC uses the disaggregated question focused only on criminal penalties, which can be found in the Workplace tab of the main data under “Criminal Penalties”)
7. Is there legislation that specifically addresses sexual harassment?+ (Note: MCC uses the sub-indicator from the additional data, not the similar question in the main data)

#### Pay:

8. Can women work the same night hours as men?
9. Can women do the same jobs as men? (This question is a combination of two questions: Can women work in jobs deemed dangerous in the same way as men? and Are women able to work in the same industries as men? If a country has a restriction on either, this question is counted as a restriction.)



**Marriage:**

10. Can a woman be “head of household” or “head of family” in the same way as a man?\*
11. Is there legislation specifically addressing domestic violence?
12. Does the legislation establish clear criminal penalties for domestic violence?+
13. Is there a specialized court or procedure for cases of domestic violence?+
14. What is the legal age of marriage for girls?+ (1 point for ages < 18 or no data)
15. Are there any exceptions to the legal age of marriage?+ (1 point for “yes”)
16. Is marriage under the legal age void or explicitly prohibited?+
17. Are there penalties in the law for authorizing or entering into child or early marriage?+
18. Do married couples jointly share legal responsibility for financially maintaining the family’s expenses?+

**Entrepreneurship:**

19. Can a woman sign a contract in the same way as a man?\*
20. Can a woman register a business in the same way as a man?\*
21. Can a woman open a bank account in the same way as a man?\*

**Assets:**

22. Do men and women have equal ownership rights to immovable property?\*
23. Do sons and daughters have equal rights to inherit assets from their parents?
24. Do female and male surviving spouses have equal rights to inherit assets?
25. Does the law grant spouses equal administrative authority over assets during marriage?
26. Does the law provide for the valuation of nonmonetary contributions?\*

**Legal:**

27. Can a woman legally confer citizenship to her children in the same way as a man?+
28. Does a woman’s testimony carry the same evidentiary weight in court as a man’s in all types of cases?+
29. If customary law is recognized as a valid source of law under the constitution, is it invalid if it violates constitutional provisions on nondiscrimination or equality?+

As better data become available, the World Bank makes backward revisions to its historical data.

*In FY19, MCC implemented a revised and expanded Gender in the Economy indicator. Due to the change in methodology, FY19 scores are not comparable to previous year’s scores.*

**Notes****Note on Calculating Medians**

In calculating medians for indicators, MCC does not include scores of countries which do not report data

(earning an N/A score) for median or percentile rank calculations. For example, if there are 55 countries in the candidate pool and only 50 report data, MCC uses only the 50 which report data in calculating the median and percentile ranks. MCC calculates separate medians for each scorecard income pool. When percentile ranks are used to determine passage, if multiple countries are tied for the minimum, their percentile ranks are set to 0%. If multiple countries are tied for the median, their percentile ranks are set to 50%. When scores instead of percentiles are used to determine passage (as in the case of Political Rights, Civil Liberties, Inflation, and, when the median for a scorecard income pool is above 90% immunized, Immunization Rate) then the median is not forced to the 50<sup>th</sup> percentile, nor is the minimum forced to the 0<sup>th</sup> percentile.

## Open Data

Following the publication of the scorecards, MCC posts the data used to construct them to its Open Data Portal (<https://data.mcc.gov/>). These data serve to clarify any ambiguities in MCC's methodology and provide access to the data that informs the scorecards.

## Endnotes

1. And be considered an Independent State by the US Department of State.
2. Rodrik, D. and Roman Wacziarg. 2005. Do Democratic Transitions Produce Bad Economic Outcomes? *American Economic Review Papers and Proceedings* 95(2): 50-55. Rodrik, Dani. 2000. Participatory Politics, Social Cooperation, and Economic Stability. *American Economic Review Papers and Proceedings* 90(2): 140-144. Rigobon, Roberto and Dani Rodrik 2005. Rule of Law, Democracy, Openness and Income: Estimating the Interrelationships. *Economics of Transition* 13(3): 533- 564. Helliwell, J. 1994. Empirical linkages between democracy and economic growth. *British Journal of Political Science* April 24(2): 225. Baum, Matthew A., and David A. Lake. 2003. The Political Economy of Growth: Democracy and Human Capital. *American Journal of Political Science* 47(2): 333-347. Wacziarg, R. and José Tavares. 2001. How Democracy Affects Growth. *European Economic Review* 45(8): 1341-1379. Lederman, Daniel, Norman Loayza, and Rodrigo Soares. 2005. Accountability and Corruption: Political Institutions Matter. *Economics and Politics* 17(1): 1-35. Clague, C., Keefer, P., Knack, S., and M. Olson. 1996. Property and contract rights in autocracies and democracies. *Journal of Economic Growth* 1(2): 243-276. Henisz, Witold J. 2000. The Institutional Environment for Economic Growth. *Economics and Politics* 12(1): 1-31. Zweifel, Thomas D., and Patricio Navia. 2000. Democracy, Dictatorship, and Infant Mortality. *Journal of Democracy* 11:99-114. Brown, David. 1999. Reading, Writing, and Regime Type: Democracy's Impact on School Enrollment. *Political Research Quarterly* 52(4): 681-707. Stasavage, David. 2005. The Role of Democracy in Uganda's Move to Universal Primary Education. *Journal of Modern African Studies* 43(1): 53-73. Stasavage, David. 2005. Democracy and Education Spending in Africa. *American Journal of Political Science* 49(2): 343-358. Brown, David and Wendy Hunter. 2004. Democracy and Human Capital Formation: Education Spending in Latin America, 1980-1997. *Comparative Political Studies* 37(7): 842-864. Farzin, Y. Hossein, and Craig A. Bond. 2006. Democracy and environmental quality *Journal of Development Economics* 81(1): 213– 235. McGuire, J.W. 2006. Democracy, Basic Service Utilization, and Under-5 Mortality: A Cross-National Study of Developing States. *World Development* 34(3):405–25. Ahlquist, J.S. 2006. Economic policy, institutions, and capital flows: portfolio and direct investment flows in developing countries. *International Studies Quarterly* 50(3): 681-704. Jensen, Nathan. 2003. Democratic Governance and Multinational Corporations. *International Organization* 57(3): 587-616. Henisz, Witold J. 2000. The Institutional Environment for Multinational Investment *Journal of Law, Economics and Organization* 16 (2): 334-364. Tsebelis, George. 1995. Decision Making in Political Systems: Veto Players in Presidentialism, Parliamentarism, Multicameralism, and Multipartyism. *British Journal of Political Science* 25(3): 289–325. Henisz, Witold J. 2004. Political Institutions and Policy Volatility. *Economics and Politics* 16(1): 1-27. Rodrik, Dani. 1999. Where Did All the Growth Go? External Shocks, Social Conflict, and Growth Collapses *Journal of Economic Growth* 4(4): 385– 412. Rivera-Batiz, Francisco L. 2002. Democracy, Governance, and Economic Growth: Theory and Evidence. *Review of Development Economics* 6(2): 225-47. Besley, Tim, Torsten Persson, and Daniel Sturm. 2006. Political Competition and Economic Performance: Theory and Evidence from the United States. NBER Working Paper No. 11484.
3. Varshney, Ashtosh. 2000. Why Have Poor Democracies Not Eliminated Poverty? A Suggestion. *Asian Survey* 40(5): 718-736. Persson, Torsten and Guido Tabellini. Democracy and Development: the Devil in the Details. NBER working paper 11993. January 2006. Halperin, Morton H, Joseph T. Seigle, and Michael M. Weinstein. 2005. *The Democracy Advantage: How Democracies Promote Prosperity and Peace*. New York: Routledge. Rodrik, D. and Roman Wacziarg. 2005. Do Democratic Transitions Produce Bad Economic Outcomes? *American Economic Review Papers and Proceedings* 95(2): 50-55. Quinn, Dennis, and John Woolley. 2001. Democracy and National

- Economic Performance: The Preference for Economic Stability. *American Journal of Political Science* 45(3). Jalan, Jyotsna, and Martin Ravallion. 1999. Are the Poor Less Well Insured: Evidence on Vulnerability to Income Risk in Rural China. *Journal of Development Economics* 58(1): 61-82.
4. Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson, and James D. Morrow. 2003. *The Logic of Political Survival*. Cambridge, Mass.: MIT Press. Besley, Timothy and Robin Burgess. 2002. The Political Economy of Government Responsiveness: Theory and Evidence From India. *Quarterly Journal of Economics*. 117(4): 1415–451. Hirschman, Albert O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, Mass.: Harvard University Press. Paul, Samuel. 1992. Accountability in Public Services: Exit, Voice and Control. *World Development* 20(7): 1047-1060. There is also some empirical evidence linking democratic institutions to poverty reduction. See Li, H., Squire, L., and H. Zou. 1998. Explaining International and Intertemporal Variations in Income Inequality. *Economic Journal* 108: 26-43. Dollar, David and Aart Kraay. 2002. Growth is Good for the Poor. *Journal of Economic Growth* 7: 195-225. Arimah, Ben C. 2004. Poverty Reduction and Human Development in Africa. *Journal of Human Development* 5(3): 399-415. Kosack, S. 2003. Effective Aid: How Democracy Allows Development Aid to Improve the Quality of Life. *World Development* 31(1): 1-22.
  5. Pritchett, Lant H., Daniel Kaufmann, and Jonathan Isham. 1997. Civil Liberties, Democracy, and the Performance of Government Projects. *World Bank Economic Review* 11(2): 219. Clague, C., Keefer, P., Knack, S., and M. Olson. 1996. Property and contract rights in autocracies and democracies. *Journal of Economic Growth* 1(2): 243-276. Henisz, Witold J. 2000. The Institutional Environment for Economic Growth. *Economics and Politics* 12(1): 1-31. Rodrik, D. and Romain Wacziarg. 2005. Do Democratic Transitions Produce Bad Economic Outcomes? *American Economic Review Papers and Proceedings* 95(2): 50-55. Rodrik, Dani. 2000. Participatory Politics, Social Cooperation, and Economic Stability. *American Economic Review Papers and Proceedings* 90(2): 140-144. Rodrik, Dani. 2000. Institutions for High-Quality Growth: What They Are and How to Acquire Them. *Studies in Comparative International Development* 35(3): 3-31. Weingast, Barry. 1995. The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development. *Journal of Law, Economics, and Organization* 11: 1-31.
  6. Blume, Lorens and Stefan Voigt. 2007. The Economic Effects of Human Rights. *Kyklos*, 60(4): 509–538. Kaufmann, Daniel. 2004. Human Rights and Governance: The Empirical Challenge. Presented at the Human Rights and Development: Towards Mutual Reinforcement Conference, New York University Law School, New York City. Vega-Gordillo, Manuel and Jose A lvarez-Arce. 2003. Economic Growth and Freedom: A Causality Study. *Cato Journal*, 23(2): 190– 215. BenYishay, A. and Roger Betancourt. 2010. Civil Liberties and Economic Development. *Journal of Institutional Economics*.
  7. Lambsdorff, Johann. 2003a. How Corruption Affects Persistent Capital Flows. *Economics of Governance* 4: 229-243. Lambsdorff, Johann. 2003b. How Corruption Affects Productivity. *Kyklos* 56: 457-474. Pellegrini, L. and R. Gerlagh. 2004. Corruption's effect on growth and its transmission channels. *Kylos* 57(3): 429-456. Fisman, Raymond and Jakob Svensson. 2007. Are corruption and taxation really harmful to growth? Firm level evidence. *Journal of Development Economics* 83: 63–75. Friedman, Eric, Simon Johnson, Daniel Kaufmann, and Pablo Zoido-Lobaton 2000. Dodging the Grabbing Hand: The Determinant of Unofficial Activity in 69 Countries. *Journal of Public Economics* 76: 459-493. Mauro, Paolo 1995. Corruption and Growth. *Quarterly Journal of Economics* 110:681-712. Kaufmann, Daniel, and Aart Kraay. 2002. Growth without Governance. *Economia* 3: 169-229. Ciocchini, Francisco, Erik Durbin, and David T.C. Ng. 2003. Does Corruption Increase Emerging Market Bond Spreads? *Journal of Economics and Business* 55: 503-528. Anderson, Christopher J., and Yuliya V. Tverdova. 2003. Corruption, Political Allegiances, and Attitudes Toward Government in Contemporary Democracies. *American Journal*

- of Political Science* 47: 91-109. Abed, George T. and Sanjeev Gupta (eds.). 2002. *Governance, Corruption and Economic Performance*. Washington D.C.: International Monetary Fund. Ades, Alberto, and Rafael Di Tella. 1999. Rents, Competition, and Corruption. *American Economic Review* 89 (4): 982-993. Li, Hongyi, Lixin Colin Xu, and Heng-Fu Zou 2000. Corruption, Income Distribution, and Growth. *Economics and Politics* 12:155-182. Johnson, Simon, Daniel Kaufmann, John McMillan, and Christopher Woodruff. 2000. Why do firms hide? Bribes and unofficial activity after communism. *Journal of Public Economics* 76: 495-520. Wei, Shang-Jin. 2000. How Taxing is Corruption on International Investors? *Review of Economics and Statistics* 82:1-11. Del Monte, Alfredo, and Erasmo Papagni. 2001. Public Expenditure, Corruption, and Economic Growth: The Case of Italy. *European Journal of Political Economy* 17: 1-16.
8. Gupta, Sanjeev, Hamid R. Davoodi, and Rosa Alonso-Terme. 2002. Does Corruption Affect Income Inequality and Poverty? *Economics of Governance* 3: 23-45. Ravallion, M., and S. Chen. 1997. What Can New Survey Data Tell Us About Recent Changes in Distribution and Poverty? *World Bank Economic Review* 11(2): 357-382. Gupta, Sanjeev, Hamid R. Davoodi, and Erwin R. Tiongson. 2001. "Corruption and the Provision of Health Care and Education Services," in *The Political Economy of Corruption*, edited by Arvind K. Jain. London: Routledge. Mauro, P. 1998. Corruption and the Composition of Government Expenditure. *Journal of Public Economics* 69: 263-279. Rajkumar, A.S. and V. Swaroop. 2002. Public Spending and Outcomes: Does Governance Matter? World Bank Policy Research Working Paper 2840. Anderson, James, Daniel Kaufmann, Francesca Recanatini. 2003. Service Delivery, Poverty and Corruption—Common Threads from Diagnostic Surveys. Background paper for 2004 World Development Report. Washington DC: World Bank. Olken, Benjamin. 2006. Corruption and the Costs of Redistribution: Micro Evidence from Indonesia. *Journal of Public Economics* 90 (4-5): 853-870.
  9. Burnside, C. and David Dollar. 2000. Aid, Policies and Growth. *American Economic Review* 90(4): 847-868. Burnside, C. and David Dollar. 2000. "Aid, Growth, the Incentive Regime, and Poverty Reduction," in *The World Bank: Structure and Policies*, edited by Christopher L. Gilbert and David Vines. Oxford: Oxford University Press. Brunetti, Aymo. 1998. Policy Volatility and Economic Growth: A Comparative, Empirical Analysis. *European Journal of Political Economy* 14: 35-52. Fatas, Antonio, and Ilian Mihov. 2005. Policy Volatility, Institutions and Economic Growth. *INSEAD*. Brunetti, A., Kisunko, G., and B. Weder. 1998. Credibility of rules and economic growth: evidence from a worldwide survey of the private sector. *World Bank Economic Review* 12, 353-384. Asteriou, Dimitrios, and Simon Price. 2005. Uncertainty, Investment and Economic Growth: Evidence from a Dynamic Panel. *Review of Development Economics* 9(2): 277-288. Sarte, P.-D. G. 2001. Rent-Seeking Bureaucracies and Oversight in a Simple Growth Model. *Journal of Economic Dynamic and Control*. 25: 1345-1365. Ayal, E., and G. Karras. 1996. Bureaucracy, investment, and growth. *Economics Letters*. 51(2): 233-259. Baum, Matthew A., and David A. Lake. 2003. The Political Economy of Growth: Democracy and Human Capital. *American Journal of Political Science*. 47: 333-347. Easterly, William, Jozef Ritzén, and Michael Woolcock. 2006. Social Cohesion, Institutions, and Growth. *Economics & Politics* 18(2): 103-120. Rauch, James E., and Peter B. Evans. 2000. Bureaucratic Structure and Bureaucratic Performance in Less Developed Countries. *Journal of Public Economics* 75: 49-71. Ayal, E., and G. Karras. 1996. Bureaucracy, investment, and growth. *Economics Letters* 51(2): 233-259. Corsi, Marcella, Andrea Gumina, and Carlo D'Ippoliti. 2006. eGovernment Economics Project (eGEP) Economic Model Final Version." *eGovernment Unit, European Commission*. Kaufmann, Daniel, and Aart Kraay. 2002. Growth without Governance. *Economia* 3: 169-229. Rajkumar, A.S. and V. Swaroop. 2002. Public Spending and Outcomes: Does Governance Matter? World Bank Policy Research Working Paper 2840. Hall, Robert E. and Charles Jones. Why Do Some Countries Produce So Much More Output per Worker than Others? *Quarterly Journal of Economics* 114: 83-116. Keefer, Phillip and Steve Knack.

- Forthcoming. Boondoggles, Rent-seeking and Political Checks and Balances: Public Investment Under Unaccountable Governments. *Review of Economics and Statistics*. Evans, Peter and James Rauch. 1999. Bureaucracy and Growth: A Cross-National Analysis of the Effects of 'Weberian' State Structures on Economic Growth. *American Sociological Review* 64(5): 748-765.
10. Gupta, Sanjeev, Hamid R. Davoodi, and Rosa Alonso-Terme. 2002. Does Corruption Affect Income Inequality and Poverty? *Economics of Governance* 3: 23-45. Chong, Alberto and César Calderón. 2000. Institutional quality and poverty measures in a cross-section of countries. *Economics of Governance* 1(2): 123-135. Abed, George T. and Sanjeev Gupta (eds.). 2002. *Governance, Corruption and Economic Performance*. Washington D.C.: International Monetary Fund. Léautier, Frannie (ed.). 2006. *Cities in a Globalizing World Governance, Performance, and Sustainability*. Washington D.C.: World Bank.
  11. Lewis, Maureen. 2006. Governance and Corruption in Public Health Care Systems. Center for Global Development Working Paper 78. Washington D.C.: Center for Global Development. Baldacci, E., Benedict Clements, Sanjeev Gupta and Qiang Cui. 2004. Social Spending, Human Capital and Growth in Developing Countries: Implications for Achieving the MDGs. IMF Working Paper 04/217.
  12. Lewis, Maureen. 2006. Governance and Corruption in Public Health Care Systems. Center for Global Development Working Paper 78. Washington D.C.: Center for Global Development. Esty, Daniel and Michael Porter. 2005. National environmental performance: an empirical analysis of policy results and determinants. *Environment and Development Economics* 10: 391-434.
  13. Rauch, James E. 2001. Leadership Selection, Internal Promotion, and Bureaucratic Corruption in Less Developed Polities. *Canadian Journal of Economics* 34(1): 240-258. World Bank. 2003. *Understanding Public Sector Performance in Transition Countries—An Empirical Contribution*. Washington, D.C.: World Bank.
  14. Henisz, Witold J. 2000. The Institutional Environment for Economic Growth. *Economics and Politics* 12(1): 1-31. Feld, Lars, and Voigt, Stefan. 2003. Economic growth and judicial independence: cross-country evidence using a new set of indicators. *European Journal of Political Economy* 19(3): 497-527.
  15. Brunetti, A., Kisunko, G., Weder, B., 1998. Credibility of rules and economic growth: evidence from a worldwide survey of the private sector. *World Bank Economic Review* 12, 353-384. Rigobon, Roberto and Dani Rodrik 2005. Rule of Law, Democracy, Openness and Income: Estimating the Interrelationships. *Economics of Transition* 13(3): 533- 564. Knack, Steve, Chris Clague, Phil Keefer, and Mancur Olson. 1999. Contract-Intensive Money: Contract Enforcement, Property Rights, and Economic Performance. *Journal of Economic Growth* 4: 185-211. Rodrik, Dani, Subramanian, Arvind, and Francesco Trebbi. 2004. Institutions Rule: The Primacy of Institutions Over Geography and Integration in Economic Development. *Journal of Economic Growth* 9(2): 131-165. Easterly, William, Jozef Ritzén, and Michael Woolcock. 2006. Social Cohesion, Institutions, and Growth. *Economics and Politics* 18(2): 103-120. Rodrik, D. (ed.) 2003. *In Search of Prosperity: Analytic Narratives on Economic Growth*. Princeton: Princeton University Press. North, D.C. 1981. *Structure and Change in Economic History*. New York: W. W. Norton & Co. Svensson, J. 1998. Investment, Property Rights and Political Instability: Theory and Evidence. *European Economic Review* 42(7): 1317-1341. Johnson, McMillan, and Woodruff. 2002. Property Rights and Finance. *The American Economic Review* 92(5): 1335-1356. Besley, Timothy. 1995. Property Rights and Investment Incentives: Theory and Evidence from Ghana. *Journal of Political Economy* 103(5): 905-93. Keefer, P., and S. Knack. 2002. Polarization, Politics, and Property Rights: Links between Inequality and Growth. *Public Choice* 111(1-2): 127-54. Mauro, Paolo. 1995. Corruption and Growth. *Quarterly Journal of Economics*, 110: 681-712. Hall, R., and C. Jones. 1999. Why Do Some Countries Produce So Much More Output per Worker than Others? *Quarterly Journal of*

- Economics* 114: 83–116. Rodrik, Dani. 1999. Where Did All the Growth Go? External Shocks, Social Conflict, and Growth Collapses *Journal of Economic Growth* 4(4): 385–412. Tornell, A., Velasco, A., 1992. The tragedy of the commons and economic growth: Why does capital flow from poor to rich countries. *Journal of Political Economy* 100: 1208–1231.
16. Chong, Alberto and César Calderón. 2000. Institutional quality and poverty measures in a cross-section of countries. *Economics of Governance* 1(2): 123–135. Dollar, D and A. Kraay 2002. Growth is Good for the Poor. *Journal of Economic Growth* 7(3): 195–225. World Bank. 2005. *Pro-Poor Growth in the 1990s: Lessons and Insights from 14 Countries*. Washington D.C.: World Bank.
  17. World Bank. 2003. *Land Policies for Growth and Poverty Reduction*. Washington D.C.: World Bank. Ghani, Ashraf. 2006. Economic development, poverty reduction, and the rule of law: Lessons from East Asia, successes and failures. High Level Commission on Legal Empowerment of the Poor. World Bank. 2006. *Doing Business 2007: How to Reform*. Washington D.C.: World Bank.
  18. Islam, Roumeen. 2006. Does More Transparency Go Along With Better Governance? *Economics and Politics*, vol. 18, no. 2, pp 121–167
  19. Ahrend, Rudiger. 2002. Press freedom, human capital and corruption. DELTA Working Paper No. 2002-11. Bhattacharyya, Sami and Roland Hodler. 2012. Media freedom and democracy: Complements or substitutes in the fight against corruption? CSAE Working Paper WPS/2012-02. Brunetti, Ayno and Beatrice Weder. 2003. A free press is bad news for corruption. *Journal of Public Economics*. 87(7-8): 1801–1824. Chowdhury, Shyamal K. 2004. The effect of democracy and press freedom on corruption: an empirical test. *Economics Letters*. 85(1): 93–101. Dirienzi, Cassandra, Joyti Das, Kathryn T. Cort and John Burbridge Jr. 2011. Corruption and the Role of Information. *Journal of International Business Studies* Vol. 38, No. 2, pp. 320–332. Freille, Sebastian, M. Emranul Haque, and Richard Kneller. 2007. A contribution to the empirics of press freedom and corruption. *European Journal of Political Economy*. 23(4): 838–862. International Monetary Fund. 2001. *IMF Survey Supplement 30*, September, Washington, D.C. Islam, Roumeen. 2006. Does More Transparency Go Along with Better Governance? *Economics and Politics* Vol. 18, No. 2, pp 121–167. Neuman, L (ed). 2002. *Access to Information: A Key to Democracy*. Atlanta: The Carter Center. Reinikka, Ritva and Jakob Svensson. 2003. The power of information: Evidence from a newspaper campaign to reduce capture. World Bank Policy Research Working Paper No. 3239. Roy, Sanjukta. *Media Development and Political Stability: An Analysis of sub-Saharan Africa*. Washington, D.C.: The Media Map Project.
  20. Arsenault, Amelia and Shawn Powers. 2010. *Media Map: Review of Literature*. Washington, D.C.: The Media Map Project. Coyne, Christopher J. and Peter T. Leeson. 2004. Read all about it! Understanding the role of media in economic development. *Kyklos*. 57(1): 21–44. DiRienzi, Cassandra, Jayoti Das, Kathryn T. Cort, and John Burbridge Jr. 2007. Corruption and the role of information. *Journal of International Business Studies*. 38(2): 320–332. Drabek, Zdenek and Warren Payne. 2002. The impact of transparency on foreign direct investment. *Journal of Economic Integration*. 17(4): 777–810. Gelos, R. Gaston and Shang-Jin Wei. 2002. Transparency and international investor behavior. National Bureau of Economic Research Working Paper No. 9260. Cambridge. Guseva, Marina, Mounira Nakaa, Anne-Sophie Novel, Kirsii Pekkala, Bachir Souberou, and Sami Stouli. 2008. *Press Freedom and Development: An Analysis of Correlations between Freedom of the Press and the Different Dimensions of Development, Poverty, Governance and Peace*. Paris: United Nations Educational Scientific and Cultural Organization. International Monetary Fund. 2001. *IMF Survey Supplement 30*. Washington, D.C.: International Monetary Fund. Neuman, L. (Ed.). 2002. *Access to Information: A Key to Democracy*. Atlanta: The Carter Center. Roumeen. 2006. Does more transparency go along with better governance? *Economics and Politics*. 18(2): 121–167. Roy, Sanjukta. 2011. *Overview Report: Measuring Media Development*. Washington, D.C.: The Media Map Project. Stiglitz, Joseph. 2002. Transparency in government. In

- R. Islam, S. Djankov & C. McLeish (Eds.), *The Right to Tell: The Role of Mass Media in Economic Development* (pp. 27-44). Washington, D.C.: The World Bank. Susman-Peña, Tara. 2012. *Healthy Media, Vibrant Societies: How Strengthening the Media Can Boost Development in sub-Saharan Africa*. Washington, D.C.: The Media Map Project.
21. Ansari, M. M. 2008. Impact of right to information on development: A perspective on India's recent experiences. Invited lecture at UNESCO World Headquarters. Paris, France. Bellver, Ana and Daniel Kaufmann. 2005. *Transparency: Initial empirics and policy applications*. Washington, D.C.: The World Bank. Besley, Timothy and Robin Burgess. 2000. The political economy of government responsiveness: Theory and evidence from India. Development Economics Discussion Paper DEDPS 28. London: Suntory and Toyota International Centres for Economics and Related Disciplines, London School of Economics and Political Science. Besley, Timothy, Robin Burgess, and Andrea Prat. 2002. Mass media and political accountability. In R. Islam, S. Djankov & C. McLeish (Eds.), *The Right to Tell: The Role of Mass Media in Economic Development* (pp. 45-60). Washington, D.C.: The World Bank. Norris, Pippa. 2008. The role of the free press in promoting democratization, good governance and human development. In M. Harvey (Ed.), Section 2 of *Media Matters: Perspectives on Advancing Governance and Development from the Global Forum for Media Development*. (pp. 66-75). Internews Europe. Roberts, Alasdair. 2002. Access to government information: An overview of issues. In *Access to Information: A Key to Democracy*. Atlanta: The Carter Center. Shirazi, Farid, Ojelanki Ngwenyama, and Olga Morawczynski. 2010. ICT expansion and the digital divide in democratic freedoms: An analysis of the impact of ICT expansion, education and ICT filtering on democracy. *Telematics and Informatics*. 27(1): 21-31. Stiglitz, Joseph. 1999. *On liberty, the right to know, and public discourse: The role of transparency in public life*. Oxford Amnesty Lecture at Oxford University, United Kingdom.
  22. Bandyopadhyay, Sanghamitra. 2009. Knowledge-based economic development: Mass media in the weightless economy. Discussion paper no. 74. Distributional Analysis Research Programme, STICERD. London: London School of Economics and Political Science. Deane, James. 2008. Why the media matters: The relevance of the media to tackling global poverty. In M. Harvey (Ed.), Section 1 of *Media Matters: Perspectives on Advancing Governance and Development from the Global Forum for Media Development* (pp. 35-44). Internews Europe. Kenny, Charles. 2002. Information and communication technologies for direct poverty alleviation: Costs and benefits. *Development Policy Review*. 20(2): 141-157. Norris, Pippa and Dieter Zinnbauer. 2002. Giving voice to the voiceless: Good governance, human development & mass communications. Background paper for the UNDP *Human Development Report*, New York: United Nations Development Programme. Sen, Amartya. 1999. *Development as Freedom*. Oxford: Oxford University Press. Shirazi, Farid. 2010. The emancipatory role of information and communication technology: A case study of internet content filtering within Iran. *Journal of Information, Communication and Ethics in Society*. 8(1): 57-84. United Nations Economic and Social Commission for Asia and the Pacific. 2000. Urban poverty alleviation. Paper presented at the Regional High-level Meeting in preparation for Istanbul+5 for Asia and the Pacific: Hangzhou, China. United Nations Educational, Scientific, and Cultural Organization. 2006. Presentation paper: Media, development, and poverty eradication. Paper presented at World Press Freedom Day: Sri Lanka.
  23. NetBlocks 2020. Internet cut in Ethiopia amid unrest following killing of singer. NetBlocks Mapping Net Freedom. <https://netblocks.org/reports/internet-cut-in-ethiopia-amid-unrestfollowing-killing-of-singer-pA25Z28b>. Woodhams, S. & Migliano, S. 2020. The Global Cost of Internet Shutdowns in 2019. Top10VPN.com. Fletcher, Terry, & Hayes-Birchler, Andria. 2020. Comparing Measures of Internet



- Censorship: Analyzing the Tradeoffs between Expert Analysis and Remote Measurement. *Proceedings of 2020 Data for Policy Conference*. <http://doi.org/10.5281/zenodo.3967398>.
- Raveendran, N., & Leberknight, C.S. 2018. Internet Censorship and Economic Impacts: A Case Study of Internet Outages in India. *Proceedings of the Twenty-fourth Americas Conference on Information Systems*. West, D.M. 2016. Internet Shutdowns cost countries \$2.4 billion last year. Center for Technology Innovation at Brookings.
24. Becker, Loren, Jessica Pickett, Ruth Levine. 2006. Measuring Commitment to Health: Global Health Indicators Working Group Report. Washington D.C.: Center for Global Development.
  25. Bloom, D. E., Canning, D., Sevilla, J. 2004. The Effect of Health on Economic Growth: A Production Function Approach. *World Development* 32(1): 1-13. Alok Bhargava, Dean T. Jamison, Lawrence J. Lau and Christopher J. L. Murray. 2001. Modeling the Effects of Health on Economic Growth. *Journal of Health Economics* 20(3): 423-40. Baldacci, E., Benedict Clements, Sanjeev Gupta and Qiang Cui. 2004. Social Spending, Human Capital and Growth in Developing Countries: Implications for Achieving the MDGs. IMF Working Paper 04/217. Gyimah-Brempong K. and M. Wilson. 2004. Human Capital and Economic Growth in Sub-Saharan Africa and OECD Countries. *Quarterly Review of Finance and Economics* 44: 296-320. Doppelhofer, G., R. Miller and X. Sala-i-Martin. 2004. Determinants of Long-Term Growth: A Bayesian Averaging of Classical Estimates Approach. *American Economic Review* 94(4): 813-835.
  26. Bloom, David E., David Canning & Mark Weston. The Value of Vaccination. *World Economics* 6(3): 15-39. Miguel, Edward, and Kremer, Michael. 2004. Worms: Identifying Impacts on Education and Health the Presence of Treatment Externalities. *Econometrica* 72(1): 159–217.
  27. Fairbank, A., Makinen, M., Schott, W., and Sakagawa, B. 2000. Poverty Reduction and Immunizations. Bethesda, Maryland: Abt Associates, Inc.
  28. MCC uses the World Bank's historical ceiling for IDA eligibility to divide countries into two assessment categories. Countries that fall below the ceiling (GNI per capita of \$0-\$1,945 for FY21) and countries above the ceiling but below the World Bank's LMIC cut-off (GNI per capita of \$1,946-\$4,045 in FY21).
  29. Becker, Loren, Jessica Pickett, Ruth Levine. 2006. Measuring Commitment to Health: Global Health Indicators Working Group Report. Washington D.C.: Center for Global Development.
  30. Bloom, D. E., Canning, D., Sevilla, J. 2004. The Effect of Health on Economic Growth: A Production Function Approach. *World Development* 32(1): 1-13. Alok Bhargava, Dean T. Jamison, Lawrence J. Lau and Christopher J. L. Murray. 2001. Modeling the Effects of Health on Economic Growth. *Journal of Health Economics* 20(3): 423-40. Baldacci, E., Benedict Clements, Sanjeev Gupta and Qiang Cui. 2004. Social Spending, Human Capital and Growth in Developing Countries: Implications for Achieving the MDGs. IMF Working Paper 04/217. Gyimah-Brempong K. and M. Wilson. 2004. Human Capital and Economic Growth in Sub-Saharan Africa and OECD Countries. *Quarterly Review of Finance and Economics* 44: 296-320.
  31. Filmer, D. and Pritchett, L. 1999. The impact of public spending on health: Does money matter? *Social Science & Medicine* 49 (10):1309–23. Filmer, Deon, Jeffrey S. Hammer, and Lant Pritchett. 2000. Weak Links in the Chain: A Diagnosis of Health Policy in Poor Countries. *World Bank Research Observer* 15 (2):199-224. Castro-Leal, F., J. Dayton, L. Demery, and K. Mehra. 1999. Public Social Spending in Africa: Do the Poor Benefit? *World Bank Research Observer* 14(1):49–72. Keefer, Philip and Stuti Khemani. 2005. Democracy, Public Expenditures, and the Poor: Understanding Incentives for Providing Public Services. *World Bank Research Observer* 20 (1): 1-27.
  32. Baldacci, E., Benedict Clements, Sanjeev Gupta and Qiang Cui. 2004. Social Spending, Human Capital and Growth in Developing Countries: Implications for Achieving the MDGs. IMF Working Paper 04/217. Ghobarah, Hazem Adam, Paul Huth, and Bruce Russett. 2004. Comparative Public

- Health: The Political Economy of Human Misery and Well-Being. *International Studies Quarterly* 48:73-94. Gupta, I. and Mitra, A. 2004. Economic Growth, Health and Poverty: An Exploratory Study for India. *Development Policy Review* 22(2): 193-206. Houweling, Tanja AJ, Caspar, Anton E Kunst, Looman, WN, and Mackenbach, Johan P. 2005. Determinants of under-5 mortality among the poor and the rich: a cross-national analysis of 43 developing countries. *International Journal of Epidemiology* 34(6): 1257-1265. Gupta, S., M. Verhoeven, and E. R. Tiongson. 2003. Public spending on health care and the poor. *Health Economics* 12(8): 685-96. Bidani, B., and M. Ravallion. 1997. Decomposing Social Indicators Using Distributional Data. *Journal of Econometrics* 77(1): 125-139. Wagstaff, A. 2003. Child Health on a Dollar a Day: Some Tentative Cross-Country Comparisons. *Social Science Medicine* 57(9): 1529-1538. Rajkumar, A.S. and V. Swaroop. 2002: Public Spending and Outcomes: Does Governance Matter? World Bank Policy Research Working Paper 2840.
33. Rajkumar, A.S. and V. Swaroop. 2002: Public Spending and Outcomes: Does Governance Matter? World Bank Policy Research Working Paper 2840. Baldacci, E., Benedict Clements, Sanjeev Gupta and Qiang Cui. 2004. Social Spending, Human Capital and Growth in Developing Countries: Implications for Achieving the MDGs. IMF Working Paper 04/217. Rajkumar, A.S. and V. Swaroop. 2002: Public Spending and Outcomes: Does Governance Matter? World Bank Policy Research Working Paper 2840. Castro-Leal, F., J. Dayton, L. Demery, and K. Mehra. 1999. Public Social Spending in Africa: Do the Poor Benefit? *World Bank Research Observer* 14(1):49-72. Barro, R. J. 1991. Economic Growth in a Cross Section of Countries. *Quarterly Journal of Economics* 106 (2):407-43. Krueger, Alan, and Mikael Lindahl. 2001. Education for Growth: Why and for Whom? *Journal of Economic Literature* 39 (4): 1101-36.
34. Moretti, E. 2004. Estimating the Social Return to Higher Education: Evidence From Longitudinal and Repeated Cross-Sectional Data. *Journal of Econometrics* 121(1-2).
35. Datt, Gaurav and Martin Ravallion. 1998. Why have Some Indian States Done Better than Others at Reducing Rural Poverty? *Economica* 65: 17-38. Christiaensen, L., L. Demery, and S. Paternostro. 2003. Macro and Micro Perspectives of Growth and Poverty in Africa. *The World Bank Economic Review* 17: 317-334.
36. Missing data points on the historic graphs may either denote data points that are off the scale of the chart, or years in which data is missing. If there is no data for the past six years, MCC indicates this with an "n/a".
37. Behrman, Jere R. and Anil B. Deolalikar. 1995. Are there differential returns to schooling by gender? The case of Indonesian labor markets. *Oxford Bulletin of Economics and Statistics*, 57(1): 97-117. Chen, Derek H. C. 2004. Gender Equality and Economic Development: The Role for Information and Communication Technologies. World Bank Policy Research Working Paper 3285. Christiaensen, L., L. Demery, and S. Paternostro. 2003. Macro and Micro Perspectives of Growth and Poverty in Africa. *The World Bank Economic Review* 17: 317-334. Deolalikar, Anil B. 1993. Gender Differences in the Returns to Schooling and in School Enrollment Rates in Indonesia. *Journal of Human Resources* 28 (4): 899-932. Drèze, Jean and Mrinalini Saran. 1995. Primary education and economic development in China and India: Overview and two case studies. In Basu, K., Pattanaik, P., and Suzumura, K. (eds) *Choice, Welfare, and Development: Essays in Honour of Amartya Sen*. Oxford: Clarendon Press. Esteve-Volart, Berta. 2000. Sex discrimination and Growth. IMF Working Paper WP/00/84. Klasen, Stephan. 2002. Low Schooling for Girls, Slower Growth for All? *World Bank Economic Review* 16(3): 345-373. Quisumbing, Agnes R. 1996. Male-female difference in agricultural productivity: methodological issues and empirical evidence. *World Development* 24 (10): 1579-95. Ravallion, M., and Datt, G. 2002. Why has economic growth been more pro-poor in some states of India than others? *Journal of Development Economics* 68 (2): 381-400. Schultz, T. Paul. 1993. Returns to women's schooling. In Elizabeth King and M. Anne

- Hill, eds., *Women's Education in Developing Countries: Barriers, Benefits, and Policy*. Baltimore: Johns Hopkins Press. Schultz, T. Paul. 1999. Health and schooling investments in Africa. *The Journal of Economic Perspectives*, 13(3): 67-88. Schultz, T. Paul. 2002. Why governments should invest more to educate girls. *World Development* 30(2): 212. Self, Sharmistha and Richard Grawbowski. 2004. Does education at all levels cause growth? India, a case study. *Economics of Education Review*, 23: 47-55. World Bank. 2001. *Engendering Development: Through Gender Equality in Rights, Resources, and Voice*. New York: Oxford University Press.
38. Alderman, Harold, and Elizabeth M. King. 1998. Gender Differences in Parental Investment in Education *Structural Change and Economic Dynamics* 9 (4): 453–68. Behrman, Jere, Andrew D. Foster, Mark R. Rosenzweig, Prem Vashishtha. 1999. Women's Schooling, Home Teaching, and Economic Growth. *Journal of Political Economy* 107 (4): 682–719. Filmer, Deon. 2000. The Structure of Social Disparities in Education: Gender and Wealth. *Policy Research Working Paper No. 2268*, World Bank Development Research Group/Poverty Reduction and Economic Management Network. Washington, D.C.: World Bank. King, Elizabeth, and Rosemary Bellew. 1991. Gains in the education of Peruvian women, 1940-1980. In Barbara Herz and Shahidur Khandkher, Eds. *Women's Work, Education, and Family Welfare in Peru*. World Bank Discussion Paper No. 166. Washington D.C.: World Bank. Klasen, Stephan. 2002. Low Schooling for Girls, Slower Growth for All? *World Bank Economic Review* 16(3): 345-373. Lavy, Victor. 1996. School Supply Constraints and Children's Educational Outcomes in Rural Ghana. *Journal of Development Economics* 51 (2): 291–314. Lillard, Lee A. and Robert J. Willis. 1993. Intergenerational Education Mobility: Effects of family and state in Malaysia. RAND Labor and Population Program Working Paper Series 93-38. Psacharopoulos, George. 1984. The contributions of education to economic growth: International comparisons. In Kendrick, J.W. (ed.) *International Comparisons of Productivity and Causes of the Slowdown*. American Enterprise Institute/Ballinger. Ridker, Ronald G., ed. 1997. Determinants of Educational Achievement and Attainment in Africa: Findings from Nine Case Studies. *SD Publication Series*, Technical Paper No. 62. Washington, D.C.: U.S. Agency for International Development. Schultz, T. Paul. 2002. Why governments should invest more to educate girls. *World Development* 30(2): 212. Thomas, Duncan. 1990. Intra-household allocation: An inferential approach. *Journal of Human Resources* 25(4): 635-64.
39. Girls' education also leads to increased income for both individuals and nations as a whole. See Herz, Barbara and Gene Sperling. 2004. What works in girls' education: evidence and policies for the developing world. New York: *Council on Foreign Relations*. Psacharopoulos, George and Harry Anthony Patrinos. 2004. Returns to investment in education: a further update. *Education Economics* 12(2): 111-134.
40. Barro, Robert J. 1999. Determinants of Democracy. *Journal of Political Economy* 107 (6): S158–83. Behrman, J.R. and A Deolalikar. 1998. Health and nutrition. In *Handbook of Development Economics*, eds. H. Chenery and T. N. Srinivasan. Amsterdam: North Holland. Cochrane, S., J. Leslie, and D. O'Hara. 1982. Parental education and child health: Inter-country evidence. *Health Policy and Education* 2:213-50. De Walque, Damien, J. S. Nakiyingi-Miir, J. Busingye, and J. A. Whitworth. 2005. Changing Association between Schooling Levels and HIV-1 Infection Over 11 Years in a Rural Population Cohort in South-West Uganda. *Tropical Medicine and International Health* 10(10): 993-1001. Dollar, David, Raymond Fisman, and Roberta Gatti. 2001. Are women really the 'fairer' sex? Corruption and women in government. *Journal of Economic Behavior and Organization* 46(4): 423–429. Gage, Anastasia, Elisabeth Sommerfeldt, and Andrea Piani. 1997. Household structure and childhood immunization in Niger and Nigeria. *Demography* 34(2): 195-309. Herz, Barbara and Gene Sperling. 2004. What works in girls' education: evidence and policies for the developing world. New York: *Council on Foreign Relations*. Hill, M. Anne and Elizabeth King. 1995. "Women's Education and Economic Well-Being." *Feminist Economics* 1(2):

- 21-46. Klasen, Stephan. 1999. Does Gender Inequality Reduce Growth and Development? Evidence from Cross-Country Regressions. *Policy Research Report on Gender and Development Working Paper No. 7*. Washington, D.C.: World Bank. Lloyd, C. B., C. E. Kaufman, and P. Hewett. 2000. The Spread of Primary Schooling in Sub-Saharan Africa: Implications for Fertility Change. *Population and Development Review* 26 (3): 483–515. Malhotra, Anju, Caren Grown, and Rohini Pande. 2003. Impact of investments in female education on gender inequality. Washington, D.C.: International Center for Research on Women. Schultz, T. Paul. 1993. “Returns to women’s schooling,” in Elizabeth King and M. Anne Hill, eds., *Women’s Education in Developing Countries: Barriers, Benefits, and Policy*. Baltimore: Johns Hopkins Press. Shuey, Dean, Bernadette B. Babishangire, Samuel Omiat and Henry Bagarukayo 1999. Increased sexual abstinence among in-school adolescents as a result of school health education in Soroti district, Uganda. *Health Education Research* 14(3): 411-419. Summers, Lawrence H. 1994. Investing in all the people: educating women in developing countries. EDI Seminar Paper No. 45, Washington, D.C.: World Bank. Thomas, D., J. Strauss, and M. H. Henriques. 1990. Child survival, height for age, and household characteristics in Brazil. *Journal of Development*. 33(2): 197-234. Trussell, T. J. and S. Preston. 1982. Estimating the covariates of child mortality from retrospective reports of mothers. *Health Policy and Education*. 3:1-36. UNESCO. 2000. “Women and Girls: Education, Not Discrimination.” Paris: UNESCO. Vandemoortele, J. and E. Delamonica. 2000. Education ‘vaccine’ against HIV/AIDS. *Current Issues in Comparative Education* 3(1). World Bank. 2002. Education and HIV/AIDS: A Window of Hope. World Bank Education Section, Human Development Department. Washington D.C.: World Bank.
41. Missing data points on the historic graphs may either denote data points that are off the scale of the chart, or years in which data is missing. If there is no data for the past six years, MCC indicates this with an “n/a”.
42. Behrman, Jere R. and Anil B. Deolalikar. 1995. Are there differential returns to schooling by gender? The case of Indonesian labor markets. *Oxford Bulletin of Economics and Statistics*, 57(1): 97-117. Chen, Derek H. C. 2004. Gender Equality and Economic Development: The Role for Information and Communication Technologies. World Bank Policy Research Working Paper 3285. David Dollar and Roberta Gatti. 1999. Gender inequality, income, and growth: Are good times good for women? World Bank Policy Research Report on Gender and Development Working Paper Series No. 1. World Bank: Washington, D.C. Deolalikar, Anil B. 1993. Gender Differences in the Returns to Schooling and in School Enrollment Rates in Indonesia. *Journal of Human Resources* 28 (4): 899–932. Klasen, Stephan. 2002. Low Schooling for Girls, Slower Growth for All? *World Bank Economic Review* 16(3): 345-373. Mathur, Ashok and Rajendra P. Mamgain. 2004. Human capital stocks: Their level of utilization and economic development in India, *Indian Journal of Labour Economics* 47(4): 655-75. Psacharopoulos, George and Harry Anthony Patrinos. 2004. Returns to investment in education: a further update. *Education Economics* 12(2): 111-134. Raza, Moonis, and H. Ramachandran. 1990. *Schooling and Rural Transformation*. New Delhi: Vikas for National Institute of Educational Planning and Administration. Schultz, T. Paul. 1993. Returns to women’s schooling. In Elizabeth King and M. Anne Hill, eds., *Women’s Education in Developing Countries: Barriers, Benefits, and Policy*. Baltimore: Johns Hopkins Press. Schultz, T. Paul. 1999. Health and schooling investments in Africa. *The Journal of Economic Perspectives*, 13(3): 67-88. Schultz, T. Paul. 2002. Why governments should invest more to educate girls. *World Development* 30(2): 212. Self, Sharmistha and Richard Grawbowski. 2004. Does education at all levels cause growth? India, a case study. *Economics of Education Review*, 23: 47-55. Smith, Lisa C. and Lawrence Haddad. 2002. How potent is economic growth in reducing undernutrition? What are the pathways of impact? New cross-country evidence. *Economic Development and Cultural Change*, 51(1): 55-76. Tilak, Jandhyala B. G. 1990. Education and earnings: Gender differences in

- India, *International Journal of Development Planning Literature* 5(4): 131-39. Tilak, Jandhyala B. G. Post-elementary Education, Poverty and Development in India. 1994. World Bank. 2001. *Engendering Development: Through Gender Equality in Rights, Resources, and Voice*. New York: Oxford University Press.
43. David Dollar and Roberta Gatti. 1999. Gender inequality, income, and growth: Are good times good for women? World Bank Policy Research Report on Gender and Development Working Paper Series No. 1. World Bank: Washington, D.C.
44. Alderman, Harold, and Elizabeth M. King. 1998. Gender Differences in Parental Investment in Education *Structural Change and Economic Dynamics* 9 (4): 453–68. Filmer, Deon. 2000. The Structure of Social Disparities in Education: Gender and Wealth. *Policy Research Working Paper No. 2268*, World Bank Development Research Group/Poverty Reduction and Economic Management Network. Washington, D.C.: World Bank. King, Elizabeth, and Rosemary Bellew. 1991. Gains in the education of Peruvian women, 1940-1980. In Barbara Herz and Shahidur Khandkher, Eds. *Women's Work, Education, and Family Welfare in Peru*. World Bank Discussion Paper No. 166. Washington D.C.: World Bank. Klasen, Stephan. 2002. Low Schooling for Girls, Slower Growth for All? *World Bank Economic Review* 16(3): 345-373. Lavy, Victor. 1996. School Supply Constraints and Children's Educational Outcomes in Rural Ghana. *Journal of Development Economics* 51 (2): 291–314. Lillard, Lee A. and Robert J. Willis. 1993. Intergenerational Education Mobility: Effects of family and state in Malaysia. RAND Labor and Population Program Working Paper Series 93-38. Mammen, Kristin, and Christina Paxson. 2000. Women's Work and Economic Development. *Journal of Economic Perspectives* 14 (4): 141–64. Schultz, T. Paul. 2002. Why governments should invest more to educate girls. *World Development* 30(2): 212. Thomas, Duncan. 1990. Intra-household allocation: An inferential approach. *Journal of Human Resources* 25(4): 635-64.
45. Behrman, J.R. and A Deolalikar. 1998. Health and nutrition. In *Handbook of Development Economics*, eds. H. Chenery and T. N. Srinivasan. Amsterdam: North Holland. Cochrane, S., J. Leslie, and D. O'Hara. 1982. Parental education and child health: Inter-country evidence. *Health Policy and Education* 2:213-50. De Walque, Damien, J. S. Nakiyingi-Miir, J. Busingye, and J. A. Whitworth. 2005. Changing Association between Schooling Levels and HIV-1 Infection Over 11 Years in a Rural Population Cohort in South-West Uganda. *Tropical Medicine and International Health* 10(10): 993-1001. De Walque, Damien. 2004. How does educational attainment affect the risk of being infected by HIV/AIDS? Evidence from a general population cohort in rural Uganda. World Bank Development Research Group Working Paper. Washington, D.C.: World Bank. Dollar, David, Raymond Fisman, and Roberta Gatti. 2001. Are women really the 'fairer' sex? Corruption and women in government. *Journal of Economic Behavior and Organization* 46(4): 423–429. Gage, Anastasia, Elisabeth Sommerfeldt, and Andrea Piani. 1997. Household structure and childhood immunization in Niger and Nigeria. *Demography* 34(2): 195-309. Herz, Barbara and Gene Sperling. 2004. What works in girls' education: evidence and policies for the developing world. New York: *Council on Foreign Relations*. Hill, M. Anne and Elizabeth King. 1995. "Women's Education and Economic Well-Being." *Feminist Economics* 1(2): 21-46. Klasen, Stephan. 1999. Does Gender Inequality Reduce Growth and Development? Evidence from Cross-Country Regressions. *Policy Research Report on Gender and Development Working Paper No. 7*. Washington, D.C.: World Bank. Malhotra, Anju, Caren Grown, and Rohini Pande. 2003. Impact of investments in female education on gender inequality. Washington, D.C.: International Center for Research on Women. Schultz, T. Paul. 1993. "Returns to women's schooling," in Elizabeth King and M. Anne Hill, eds., *Women's Education in Developing Countries: Barriers, Benefits, and Policy*. Baltimore: Johns Hopkins Press. Smith, Lisa C., and Lawrence Haddad. 1999. Explaining child malnutrition in developing countries: a cross-country analysis. International Food Policy Research

- Institute (IFPRI) Food Consumption and Nutrition Division Discussion Paper 60. Washington, D.C.: IFPRI. Subbarao, K., and Laura Raney. 1995. Social gains from female education. *Economic Development and Cultural Change* 44 (1): 105-28. Summers, Lawrence H. 1994. Investing in all the people: educating women in developing countries. EDI Seminar Paper No. 45, Washington, D.C.: World Bank. Thomas, D., J. Strauss, and M. H. Henriques. 1990. Child survival, height for age, and household characteristics in Brazil. *Journal of Development*. 33(2): 197-234. Trussell, T. J. and S. Preston. 1982. Estimating the covariates of child mortality from retrospective reports of mothers. *Health Policy and Education*. 3:1-36. UNESCO. 2000. "Women and Girls: Education, Not Discrimination." Paris: UNESCO. UNICEF. 2002. Education and HIV Prevention. Citing data from Kenya Demographic and Health Survey. New York: UNICEF. Vandemoortele, J. and E. Delamonica. 2000. Education 'vaccine' against HIVAIDS. *Current Issues in Comparative Education* 3(1).
46. UNICEF. 2009. Diarrhoea: Why children are still dying and what can be done. Access at: [http://whqlibdoc.who.int/publications/2009/9789241598415\\_eng.pdf](http://whqlibdoc.who.int/publications/2009/9789241598415_eng.pdf).
  47. Cumming, Oliver. 2008. Tackling the silent killer: The case for sanitation. London: Water Aid. Organization for Economic Cooperation and Development. 2011. Benefits of Investing in Water and Sanitation: An OECD Perspective. Paris: OECD Publishing. Hutton et al, UNDP (2006) 'Economic and health effects of increasing coverage of low cost sanitation interventions,' *Human Development Report Office occasional paper* Evans, Hutton and Haller (2004), "Closing the sanitation gap: the case for better public funding of sanitation and hygiene", *OECD Round Table on Sustainable Development 2004* UNDP (2006) *Human Development Report: Beyond Scarcity: Power, Poverty, and the Global Water Crisis*. New York: UNDP. World Bank (2008) *Environmental Health and Child Survival: Epidemiology, Economics, and Experiences*. Washington, D.C.: The World Bank. Haller L, Hutton G, and Bartram J. (2007). Estimating the costs and health benefits of water and sanitation improvements at global level. *Journal of Water and Health* 5:4, 476-480. Sijbesma, C. (2008). Sanitation and Hygiene in South Asia: Progress and Challenges. Chapter 25 from Beyond Construction Use by All. IRC, WaterAid and the WSSCC, Delft, Netherlands.
  48. Organization for Economic Cooperation and Development. 2011. Benefits of Investing in Water and Sanitation: An OECD Perspective. Paris: OECD Publishing. Evans, Hutton and Haller (2004), "Closing the sanitation gap: the case for better public funding of sanitation and hygiene", *OECD Round Table on Sustainable Development 2004* UNDP (2006) *Human Development Report: Beyond Scarcity: Power, Poverty, and the Global Water Crisis*. New York: UNDP. World Bank (2008) *Environmental Health and Child Survival: Epidemiology, Economics, and Experiences*. Washington, D.C.: The World Bank. Sijbesma, C. (2008). Sanitation and Hygiene in South Asia: Progress and Challenges. Chapter 25 from Beyond Construction Use by All. IRC, WaterAid and the WSSCC, Delft, Netherlands.
  49. Evans, Hutton and Haller (2004), "Closing the sanitation gap: the case for better public funding of sanitation and hygiene", *OECD Round Table on Sustainable Development 2004*. UNDP (2006) *Human Development Report: Beyond Scarcity: Power, Poverty, and the Global Water Crisis*. New York: UNDP. World Bank (2008) *Environmental Health and Child Survival: Epidemiology, Economics, and Experiences*. Washington, D.C.: The World Bank. Bethony, Jeffrey, Simon Brokker, Marco Albonico, Stefan M. Geiger, Alex Loukas, David Diemert, and Peter J. Hotez. 2006. Soil-transmitted helminth infections: ascariasis, trichuriasis, and hookworm. *Lancet*, 367: 1521-32.
  50. Balmford, A., Bruner A, Cooper P, Costanza R, Farber S, Green RE, Jenkins M, Jefferiss P, Jessamy V, Madden J, Munro K, Myers N, Naeem S, Paavola J, Rayment M, Rosendo S, Roughgarden J, Trumper K, Turner RK. 2002. Economic reasons for conserving wild nature. *Science* 297: 950-953. Costanza, Robert, Ralph d'Arge, Rudolf de Groot, Stephen Farber, Monica Grasso, Bruce Hannon, Karin Limburg, Shaid Naeem, Robert V O'Neill, Jose Paruelo, Robert G Raskin, Paul Sutton, and

- Marjan van den Belt. 1997. The value of the world's ecosystem services and natural capital. *Nature*, 387(15): 253-260. Costanza, Robert, Ralph d'Arge, Rudolf de Groot, Stephen Farber, Monica Grasso, Bruce Hannon, Karin Limburg, Shaid Naeem, Robert V O'Neill, Jose Paruelo, Robert G Raskin, Paul Sutton, and Marjan van den Belt. 1998. The value of ecosystem services: putting the issues in perspective. *Ecological Economics*, 25(1): 67-72. Costanza, Robert, Brendan Fisher, Kenneth Mulder, Shuang Liu, and Treg Christopher. 2007. Biodiversity and ecosystem services: A multi-scale empirical study of the relationship between species richness and net primary production. *Ecological Economics*, 61(2-3): 478-491. Kremen C, Niles JO, Dalton MG, Daily GC, Ehrlich PR, Fay JP, Grewal D, and Guillery RP. 2000. Economic incentives for rain forest conservation across scales. *Science* 288: 1828–1832. Millennium Ecosystem Assessment, 2005. *Ecosystems and Human Well-Being: General Synthesis*. New York: Island Press. Turner, R. Kerry, Jouni Paavola, Philip Cooper, Stephen Farber, Valma Jessamy, and Stavros Georgiou. 2003. Valuing nature: Lessons learned and future research directions. *Ecological Economics*, 46(3): 493-510.
51. Dobie, Philip. 2001. *Poverty and the Drylands*. Nairobi: United Nations Development Programme, Drylands Development Centre. Hussain, I. and M.A. Hanra. 2003. Does Irrigation water matter for rural poverty alleviation?: Evidence from South and South-East Asia. *Water Policy* 5:429–442. Millennium Ecosystem Assessment, 2005. *Ecosystems and Human Well-Being: General Synthesis*. New York: Island Press. Rijsberman, F. 2003. Can development of water resources reduce poverty? *Water Policy* 5: 399–412. Swinton, Scott M., Frank Lupi, G. Philip Robertson, and Stephen K. Hamilton. 2007. Ecosystem services and agriculture: Cultivating agricultural ecosystems for diverse benefits. *Ecological Economics*, 64(2): 245-252. Tscharntke, Teja, Alexandra M. Klein, Andreas Kruess, Ingolf Steffan-Dewenter and Carsten Thies. 2005. Landscape perspectives on agricultural intensification and biodiversity – ecosystem service management. *Ecology Letters*, 8(8): 857-874. Zhang, Wei, Taylor H. Ricketts, Claire Kremen, Karen Carney, and Scott M. Swinton. 2007. Ecosystem services and dis-services to agriculture. *Ecological Economics*, 64(2): 253-260.
52. Moreno, Luis Alberto. "Banking on Global Sustainability." *Americas* 63, no. 2 (March 2011): 36-39. *Academic Search Premier*, EBSCOhost (accessed July 7, 2011). Hoekstra, Jonathan, Timothy Boucher, Taylor Ricketts, and Carter Robers. 2005. Confronting a Biome Crisis: Global Disparities of Habitat Loss and Protection. *Ecology Letters*. 8: 23-29. Panayotou, Theodore. 2003. Chapter 2: Economic growth and the environment. *Economic Survey of Europe*, 2: 45-67. Barretta, Gary W. and Eugene P. Odum. The Twenty-First Century: The World at Carrying Capacity. *BioScience*, 50(4): 363-368. Ayres, Robert U. Sustainability economics: Where do we stand? *Ecological Economics*, 67(2): 281-310. Arrow, Kenneth, Bert Bolin, Robert Costanza, Partha Dasgupta, Carl Folke, C.S. Holling, Bengt-Owe Jansson, Simon Levin, Karl-Goran Maler, Charles Perrings, and David Pimentel. 1996. Economic growth, carrying capacity, and the environment. *Ecological Application*, 6(1): 13-15. Díaz Sandra, Joseph Fargione, F. Stuart Chapin III, David Tilman. 2006. Biodiversity loss threatens human well-being. *PLoS Biology* 4(8): e277.
53. Millennium Ecosystem Assessment, 2005. *Ecosystems and Human Well-Being: General Synthesis*. New York: Island Press. UN Millennium Project. 2005. *Environmental and Human Well-Being: A Practical Strategy*. London: Earthscan. Díaz Sandra, Joseph Fargione, F. Stuart Chapin III, David Tilman. 2006. Biodiversity loss threatens human well-being. *PLoS Biology* 4(8): e277. DFID (U.K. Department for International Development) Livestock and Wildlife Advisory Group. 2002. *Wildlife and Poverty Study*. London: Department for International Development. U.K. Department for International Development, European Commission, United Nations Development Programme), and World Bank. 2002. Linking Poverty Reduction and Environmental Management: Policy Challenges and Opportunities. Working Paper 24824. Washington, D.C: World Bank. World Resources Institute. 2005. World resources 2005: The wealth of the poor: Managing ecosystems to fight poverty. Washington, D.C.: WRI. Wunder, Sven. 2001. Poverty alleviation and

- tropical forests – What scope for synergies? *World Development*, 29(11): 1817-1833.
54. Jalilian, Hossein, Colin Kirkpatrick, and David Parker. 2007. The Impact of Regulation on Economic Growth in Developing Countries: A Cross-Country Analysis. *World Development* 35(1): 87–103. Loayza, Norman, Ana Maria Oviedo, and Luis Servén. 2006. “The Impact of Regulation on Growth and Informality Cross-Country Evidence,” in *Linking the Formal and Informal Economy: Concepts and Policies*, edited by Basudeb Guha-Khasnobis, Ravi Kanbur, and Elinor Ostrom. Oxford: Oxford University Press. World Bank. 2006. *Doing Business 2007: How to Reform*. Washington D.C.: World Bank. Djankov, Simeon, Caralee McLiesh, Rita Ramalho. 2006. Regulation and Growth. *Economic Letters* 3: 395-401. Djankov, Simeon, Rafael La Porta, Florencio Lopez de Silanes, and Andrei Shleifer. 2002. Regulation of Entry. *Quarterly Journal of Economics* 117: 1-37. Friedman, Eric, Simon Johnson, Daniel Kaufmann, and Pablo Zoido-Lobaton. 2000. Dodging the Grabbing Hand: The Determinant of Unofficial Activity in 69 Countries. *Journal of Public Economics* 76: 459-493. Koedijk, Kees and Jeroen Kremers. 1996. Market Opening, Regulation and Growth in Europe. *Economic Policy* 23: 445-467. Heckman, James and Carmen Pagés. 2000. The Cost of Job Security Regulation: Evidence from Latin American Labor Markets. *NBER Working Paper 7773*. CEPR-IFS. 2003. The Link Between Product Market Reform and Macroeconomic Performance. Final report ECFIN-E/2002.002. Johnson, McMillan, and Woodruff. 2002. Property Rights and Finance. *The American Economic Review* 92(5). Ades, Alberto, and Rafael Di Tella. 1999. Rents, Competition, and Corruption. *American Economic Review* 89: 982-993. Johnson, Simon, Daniel Kaufmann, and Pablo Zoido-Lobaton. 1998. Regulatory Discretion and the Unofficial Economy. *American Economic Review* 88(2): 387-392. Dollar, David, Mary Hallward-Driemeier, and Taye Mary & Mengistae, Taye, 2006. Investment climate and international integration. *World Development* 34(9): 1498-1516. Sala-i-Martin, X. 1997. I Just Ran 2 Million Regressions. *American Economic Review* 87(2): 178-83.
  55. Pg. 4 of Djankov, Simeon, Caralee McLiesh, Rita Ramalho. 2006. Regulation and Growth. *Economic Letters* 3: 395-401.
  56. Alesina, Alberto, Silvia Ardagna, Giuseppe Nicoletti, and Fabio Schiantarelli. 2005. Regulation and Investment. *Journal of the European Economic Association* 3: 791-825. Heckman, James and Carmen Pagés. 2000. The Cost of Job Security Regulation: Evidence from Latin American Labor Markets. *Economía* 2: 109–154. Johnson, Simon, Daniel Kaufmann, and Pablo Zoido-Lobaton. 1998. Regulatory Discretion and the Unofficial Economy. *American Economic Review* 88(2): 387-392. Ades, Alberto, and Rafael Di Tella. 1999. Rents, Competition, and Corruption. *American Economic Review* 89: 982-993. Ades, Alberto, and Rafael Di Tella. 1997. National Champions and Corruption: Some Unpleasant Interventionist Arithmetic. *The Economic Journal* 107:1023-1042. Fisman, Raymond, and Shang-Jin Wei. 2004. Tax Rates and Tax Evasion: Evidence from ‘Missing Imports’ in China. *Journal of Political Economy* 112(2): 471-496. Djankov, Simeon, Rafael La Porta, Florencio Lopez de Silanes, and Andrei Shleifer. 2002. Regulation of Entry. *Quarterly Journal of Economics* 117: 1-37. Larsson, Allan. 2006. Empowerment of the poor in informal employment. High Level Commission on Legal Empowerment of the Poor.
  57. World Bank. 2003. *Land Policies for Growth and Poverty Reduction*. Washington D.C.: World Bank. Besley, Timothy. 1995. Property Rights and Investment Incentives: Theory and Evidence from Ghana. *Journal of Political Economy* 103(5): 905-93. Keefer, P., and S. Knack. 2002. Polarization, Politics, and Property Rights: Links between Inequality and Growth. *Public Choice* 111(1–2): 127–54.; De Soto, Hernando. 2000. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. New York: Basic Books.; Birdsall, N., and J. L. Londono. 1997. Asset Inequality Matters: An Assessment of the World Bank’s Approach to Poverty Reduction. *American Economic Review* 87(2): 32–37. Acemoglu, D., S. Johnson, and J. Robinson. 2001. The Colonial Origins of Comparative Development: An Empirical



- Investigation. *American Economic Review* 91 (5): 1369-1401. Rodrik, Dani. 2000. Institutions for High-Quality Growth: What They Are and How to Acquire Them. *Studies in Comparative International Development* 35(3): 3-31.; Alden-Wily, L. 2002. Comments on the Legal Basis for Land Administration in an African Context. Paper presented at the World Bank Regional Land Policy Workshop, April 29–May 2, Kampala, Uganda. The empirical literature on secure land tenure also suggests a strong link to sustainable natural resource management. See A. Cattaneo, A. 2001. Deforestation in the Brazilian Amazon: Comparing the Impacts of Macroeconomic Shocks, Land Tenure, and Technological Change. *Land Economics* 77(2): 219–40. World Bank. 2003. *Land Policies for Growth and Poverty Reduction*. Washington D.C.: World Bank.) Cross-national empirical studies also demonstrate a strong relationship between rule of law – a close correlate of secure land tenure – and environmental protection. See Daniel Esty and Michael Porter. 2005. National environmental performance: an empirical analysis of policy results and determinants. *Environment and Development Economics* 10: 391–434; Robert T. Deacon. 1994. Deforestation and the Rule of Law in a Cross-Section of Countries. *Land Economics* 70: 414-430.
58. Ravallion, M., and Datt, G. 2002. Why has economic growth been more pro-poor in some states of India than others? *Journal of Development Economics* 68 (2): 381-400. Christiaensen, L., L. Demery, and S. Paternostro. 2003. Macro and Micro Perspectives of Growth and Poverty in Africa. *The World Bank Economic Review* 17: 317-334. World Bank. 2003. *Land Policies for Growth and Poverty Reduction*. Washington D.C.: World Bank.
59. World Bank. 2003. *Land Policies for Growth and Poverty Reduction*. Washington D.C.: World Bank. Adesina, A. A., and K. K. Djato. 1996. Farm Size, Relative Efficiency, and Agrarian Policy in Côte d'Ivoire: Profit Function Analysis of Rice Farms. *Agricultural Economics* 14(2): 93–102. Adesina, A. A., and K. K. Djato. 1997. Relative Efficiency of Women as Farm Managers: Profit Function Analysis in Côte d'Ivoire. *Agricultural Economics* 16(1): 47–53. Udry, C. 1996. Gender, Agricultural Production, and the Theory of the Household. *Journal of Political Economy* 104(5): 1010–46. Dolan, C. S. 2001. The 'Good Wife': Struggles over Resources in the Kenyan Horticultural Sector. *Journal of Development Studies* 37(3): 39–70. Quisumbing, A. R., and K. Otsuka. 2001. Land, Trees, and Women: Evolution of Land Tenure Institutions in Western Ghana and Sumatra. Research Report no. 121. International Food Policy Research Institute, Washington D.C. Deere, C. D., and M. Leon. 2001. *Empowering Women: Land and Property Rights in Latin America*. Pitt Latin America Series. Pittsburgh: University of Pittsburgh Press. Schultz, T. P. 1999. Women's Role in the Agricultural Household: Bargaining and Human Capital. Discussion Paper no. 803. Yale University, Economic Growth Center, New Haven, Connecticut. Strickland, Richard. 2004. To Have and To Hold: Women's Property and Inheritance Rights in the Context of HIV/AIDS in Sub-Saharan Africa.
60. As described in the Doing Business in 2007 report, “[w]hen an economy has no laws or regulations covering a specific area — for example bankruptcy — it receives a ‘no practice’ mark. Similarly, if regulation exists but is never used in practice, or if a competing regulation prohibits such practice, the economy receives a ‘no practice’ mark. This puts it at the bottom of the ranking” (World Bank 2006: 74).
61. Beck, Thorsten and Asli Demirgüç-Kunt. 2006. Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30(11): 2931-2943. Beck, Thorsten, Asli Demirgüç-Kunt, and María Soledad Martínez Pería. 2008. Bank Financing for SMEs around the World: Drivers Obstacles, Business Models, and Lending Practices. Washington, D.C.: The World Bank. Demirgüç-Kunt, Asli, Thorsten Beck, and Patrick Honohan. 2008. Chapter 2: Firms' Access to Finance: Entry, Growth, and Productivity from Finance for All? Policies and Pitfalls in Expanding Access. Washington, D.C.: The World Bank. Diagne, Aliou, and Manfred Zeller. 2001. Access to Credit and Its Impact on Welfare in Malawi. Research Report 116. Washington, D.C.:

- International Food Policy Research Institute. Diagne, Aliou, Manfred Zeller, and Manohar Sharma. 2000. Empirical Measurements of Households' Access to Credit and Credit Constraints in Developing Countries: Methodological Issues and Evidence. Food Consumption and Nutrition Division Working Paper No. 90. Washington, D.C.: International Food Policy Research Institute.
- Schiffer, Mirjam and Beatrice Weder. 2001. Firm Size and the Business Environment: Worldwide Survey Results. Washington, D.C.: The World Bank.
- Zeller, Manfred, Gertrud Schrieder, Joachim von Braun, and Franz Heidhues. 1997. Rural finance for food security for the poor: Implications for research and policy. Food Policy Review No. 4. Washington, D.C.: International Food Policy Research Institute.
62. Bustelo, Frederic. 2009 Finance for all: integrating microfinance to credit information sharing in Bolivia. Celebrating Reforms 2009, International Finance Corporation. Luoto, Jill, Craig McIntosh, and Bruce Wydick. 2007. Credit Information Systems in Less Developed Countries: A Test with Microfinance in Guatemala. *Economic Development and Cultural Change*, 55(2): 313-334.
- McIntosh, Craig, and Bruce Wydick. 2004. A decomposition of incentive and screening effects in credit market information systems. Working paper, Department of Economics, University of California, San Diego, School of International Relations and Pacific Studies, and University of San Francisco.
- De Janvry, Alain, Craig McIntosh, Elisabeth Sadoulet. 2010. The supply- and demand-side impacts of credit market information. *Journal of Development Economics*, 93(2): 173-188.
- McIntosh, Craig and Bruce Wydick. 2005. Competition and microfinance. *Journal of Development Economics*, 78(2): 271-298.
- Padilla, Jorge A., and Marco Pagano. 2000. Sharing default information as a borrower discipline device. *European Economic Review*, 44(10): 1951-80.
- Powell, Andrew, Nataliya Mylenko, Margaret Miller, and Giovanni Majnoni. 2004. Improving credit information, bank regulation, and supervision: On the role and design of public credit registries. World Bank Policy Research Working Paper No. 3443. Washington, D.C.: The World Bank.
63. Fleisig, Heywood, Mehnaz Safavian, and Nuria de la Peña. 2006. Reforming Collateral Laws to Expand Access to Credit. Washington, D.C.: The World Bank.
- Safavian, Mehnaz, Heywood Fleisig, and Jevgenijs Steinbuck. 2006. Unlocking dead capital: How reforming collateral laws improves access to finance. Public Policy for the Private Sector series. Washington, D.C.: The World Bank.
- Fleisig, Heywood. 1996. Secured transactions: The power of collateral. *Finance & Development*, 33(2): 44-47.
64. World Bank. 2006. *Doing Business 2007: How to Reform*. Washington D.C.: World Bank.
- Djankov, Simeon, Rafael La Porta, Florencio Lopez de Silanes, and Andrei Shleifer. 2002. Regulation of Entry. *Quarterly Journal of Economics* 117: 1-37.
- De Soto, H. 1998. *The Other Path: The Invisible Revolution in the Third World*. New York: Harper Collins.
- De Soto, Hernando. 2000. *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. New York: Basic Books.
- Klapper, Leora, Luc Laeven, and Raghuram Rajan. 2006. Entry regulation as a barrier to entrepreneurship. *Journal of Financial Economics* 82(3): 591-629.
65. World Bank. 2005. *Doing Business in 2005: Removing Obstacles to Growth*. Washington D.C.: World Bank.
- Djankov, Simeon, Rafael La Porta, Florencio Lopez de Silanes, and Andrei Shleifer. 2002. Regulation of Entry. *Quarterly Journal of Economics* 117: 1-37.
- Mauro, Paolo. 1995. Corruption and Growth. *Quarterly Journal of Economics* 110: 681-712.
- Baum, Matthew A., and David A. Lake. 2003. The Political Economy of Growth: Democracy and Human Capital. *American Journal of Political Science* 47(2): 333-347.
- Schneider, Friedrich and Dominik Enste. 2000. Shadow economies: Size, causes, and consequences. *The Journal of Economic Literature* 38(1): 77-114.
- Schneider, F., Enste D. 2002. *The Shadow Economy: Theoretical Approaches, Empirical Studies, and Political Implications*. Cambridge, UK: Cambridge University Press.
- Alesina, Alberto, Silvia Ardagna, Giuseppe Nicoletti, and Fabio Schiantarelli. 2005. Regulation and Investment. *Journal of the European Economic Association* 3: 791-825.
- Fonseca R., P. Lopez-Garcia

- and C.A. Pissarides. 2001. Entrepreneurship, Start-up Costs and Employment. *European Economic Review* 45: 692-705. Bertrand, Marianne, and Francis Kramarz. 2002. Does Entry Regulation Hinder Job Creation? Evidence from the French Retail Industry. *Quarterly Journal of Economics* 117(4): 1369-1414. According to the *Doing Business in 2005* report, “coupled with additional reforms, reductions in the cost of starting a business can yield even higher economic returns. A study by the World Bank shows that trade openness contributes about 0.4 percentage points annual economic growth in countries where labor markets are flexible and business start-up is easy. Why? Because trade enhances growth by channeling resources to their most productive uses in the economy. But if such resource movement is encumbered by high entry barriers, the effects of trade diminish and can even be reversed. This explains the negative effects of trade liberalization in some Latin American countries, where entry is difficult and labor markets inflexible.”
66. World Bank. 2005. *Doing Business in 2005: Removing Obstacles to Growth*. Washington D.C.: World Bank.
  67. World Bank. 2005. *Doing Business in 2005: Removing Obstacles to Growth*. Washington D.C.: World Bank.
  68. De Soto, H. 1998. *The Other Path: The Invisible Revolution in the Third World*, New York: Harper Collins.
  69. The minimum observed value is the minimum of all 189 countries covered by the *Doing Business 2020* report. The maximum observed value is the maximum of all 189 countries covered by the *Doing Business 2020* report plus one (day or percentage point) to account for the “no practice” values.
  70. Sachs, Jeffrey, and Andrew Warner. 1995. Economic Reform and the Process of Global Integration. *Brookings Papers on Economic Activity* 1: 1-118. Dollar, David. 1992. Outward-Oriented Developing Economies Really Do Grow More Rapidly: Evidence from 95 LDCs, 1976-85. *Economic Development and Cultural Change* 523-544. Frankel, Jeffrey, and David Romer. 1999. Does Trade Cause Growth? *American Economic Review* 89(3): 379-399. Hall, R. and C. Jones. 1999. Why Do Some Countries Produce So Much More Output Per Worker Than Others? *Quarterly Journal of Economics* 114 (1): 83-116, 1999. Wacziarg, Romain. 1998. Measuring the Dynamic Gains from Trade. World Bank Working Paper no. 2001. Washington D.C.: World Bank. Wacziarg, R. T. and Karen Horn Welch. 2003. Trade Liberalization and Growth: New Evidence. NBER Working Paper 10152. Frankel, J.A. and Eduardo A. Cavallo. 2004. Does Openness to Trade Make Countries More Vulnerable to Sudden Stops, Or Less? Using Gravity to Establish Causality. NBER Working Paper 10957. Paul M. Romer. 1994. New Goods, Old Theory, and the Welfare Costs of Trade Restrictions. NBER Working Paper. Jonnson, G. and Arvind Subramanian. 1999. Dynamic Gains from Trade: Evidence from South Africa. International Monetary Fund Working Paper WP/00/45. Dollar, David and Aart Kraay. 2004. Trade, Growth, and Poverty. *Economic Journal* 114(493): 22-49. Arvind Panagariya, 2004. Miracles and Debacles: In Defense of Trade Openness. *The World Economy* 27(8): 1149-1171. Alcalá, Francisco, and Antonio Ciccone. 2004. Trade and Productivity. *Quarterly Journal of Economics* 119(2): 613-646. Lee, H.Y., L.A. Ricci, and R. Rigobon. 2004. Once Again, is Openness Good for Growth? *Journal of Development Economics* 75(2): 451-72. Dollar, David and Aart Kraay. 2002. Institutions, Trade, and Growth. *Journal of Monetary Economics* 50:133-162. Sachs, Jeffrey D. and Warner, Andrew M. 1997. Sources of slow growth in African economies. *Journal of African Economies* 6(3): 335-76. Salinas, Gonzalo, and Ataman Aksoy. 2006. Growth before and after trade liberalization. World Bank Policy Research Working Paper 4062. Washington D.C.: World Bank. Doppelhofer, G., R. Miller and X. Sala-i-Martin. 2004. Determinants of Long-Term Growth: A Bayesian Averaging of Classical Estimates Approach. *American Economic Review* 94(4): 813-835.
  71. Bottasso, Anna, and Alessandro Sembenelli. 2001. Market Power, Productivity and the EU Single

- Market Program: Evidence from a Panel of Italian Firms. *European Economic Review* 45(1): 167-186. Levinsohn, James A. 1993. Testing the Imports-as-Market-Discipline Hypothesis. *Journal of International Economics* 35(1-2): 1-22. Fisman, Ades, Alberto, and Rafael Di Tella. 1997. National Champions and Corruption: Some Unpleasant Interventionist Arithmetic. *The Economic Journal* 107: 1023-1042. Ades, Alberto, and Rafael Di Tella, 1999. Rent, Competition, and Corruption. *American Economic Review* 89(4): 982-993. Treisman, D. 2000. The Causes of Corruption: A Cross-National Study. *Journal of Public Economics* 76: 399-457. Gerring, J. and S. Thacker. 2005. Do Neoliberal Policies Deter Political Corruption? *International Organization* 59(1): 233-254. Sandholtz, Wayne and William Koetzle. 2000. Accounting for Corruption: Economic Structure, Democracy, and Trade. *International Studies Quarterly* 44 (1): 31-50. World Bank. 2006. *Doing Business 2007: How to Reform*. Washington D.C.: World Bank.
72. Sachs, Jeffrey, and Andrew Warner. 1995. Economic Reform and the Process of Global Integration. *Brookings Papers on Economic Activity* 1: 1-118.
73. Bannister, Geoffery J. and Kamau Thugge. May 2001. International Trade and Poverty Alleviation. IMF working paper WP/01/54. Christiaensen, L., L. Demery, and S. Paternostro. 2003. Macro and Micro Perspectives of Growth and Poverty in Africa. *The World Bank Economic Review* 17: 317-334. Berg, A. and Anne Krueger. 2003. Trade, Growth and Poverty: A Selective Survey. International Monetary Fund Working Paper WP/03/30. Kraay, Aart, and David Dollar. 2004. Trade, Growth, and Poverty. *The Economic Journal* 114 (493): F22-F49. Winters, A., N. McCulloch, and A. McKay. 2004. Trade Liberalization and Poverty: The Evidence So Far. *Journal of Economic Literature* XLII: 72-115.
74. Bruno, M., and W. Easterly. 1998. Inflation crises and long-run growth. *Journal of Monetary Economics* 41(1): 3-26. Bruno, M. and Easterly, W. 1996. Inflation and growth: in search of a stable relationship. *Federal Reserve Bank of St. Louis Review* 78(3): 139-146. Easterly, William. 2001. *The Elusive Quest for Growth*. Cambridge, MA: MIT Press. Barro, R. J. 1997. *Determinants of economic growth*. Cambridge, Mass.: MIT Press. Andres, J. and I. Hernando. 1999. "Does Inflation harm Economic Growth? Evidence from the OECD." in *The Costs and Benefits of Price Stability*, edited by M. Feldstein. Chicago: University of Chicago Press. Bolton, Daniel M. and Alexander, W. Robert J. 2001. The Differing Consequences of Low and High Rates of Inflation. *Applied Economics Letters* 8(6): 411-14. Fernandez Valdovinos, Carlos G. 2003. Inflation and Economic Growth in the Long Run. *Economics Letters* 80(2): 167-73.
75. De Gregorio, Jose. 1993. Inflation, Taxation and Long-Run Growth. *Journal of Monetary Economics* 31: 271-98. Jones, L., R. E. Manuelli and P. E. Rossi. 1993. Optimal Taxation in Models of Endogenous Growth. *Journal of Political Economy* 101(3): 485-517. Feldstein, Martin. 1999. "Capital Income Taxes and the Benefit of Price Stability," in *The Costs and Benefits of Achieving Price Stability*, edited by M. Feldstein. Chicago: Chicago University Press. Fischer, Stanley, 1993. The Role of Macroeconomic Factors in Growth *Journal of Monetary Economics* 32(3): 485-512.
76. Boyd, John, Ross Levine, and Bruce Smith. 2001. The Impact of Inflation on Financial Sector Performance. *Journal of Monetary Economics* 47: 221-48. Braun, M., and R. Di Tella. 2004. Inflation, Inflation Variability, and Corruption. *Economics and Politics* 16(1): 77-100. Al-Marhubi, F. A. 2000. Corruption and Inflation. *Economics Letters* 66(2): 199-202.
77. Easterly, W. and Stanley Fischer. 2001. Inflation and the Poor. *Journal of Money, Credit, and Banking* 1: 159-178. Datt, Gaurav and Martin Ravallion. 1998. Why Have Some Indian States Done Better Than Others at Reducing Rural Poverty? *Economica* 65: 17-38. Agenor, Pierre-Richard. 1999. "Stabilization Policies, Poverty, and the Labor Market," in *Poverty in sub-Saharan Africa*, edited by E. Thorbecke. Ithaca, NY: Cornell University Press. Romer, C. and Romer, D. 1999. "Monetary Policy and the Well-Being of the Poor." In *Income Inequality: Issues and Policy Options*. Kansas City: Federal Reserve Bank of Kansas City. Pg 159-201. Cardoso, Eliana. 1992. Inflation and

- Poverty. *NBER Working Paper* 4006. Powers, Elizabeth T. 1995. Inflation, Unemployment, and Poverty Revisited. *Economic Review* 3: 2-13. Li, Hongyi, and Heng-fu Zou. 2002. Inflation, Growth, and Income Distribution: A Cross-country Study. *Annals of Economics and Finance* 3(1): 85-101. Christiaensen, L., L. Demery, and S. Paternostro. 2003. Macro and Micro Perspectives of Growth and Poverty in Africa. *The World Bank Economic Review* 17: 317-334. World Bank. 2005. *Pro-Poor Growth in the 1990s: Lessons and Insights from 14 Countries*. Washington D.C.: World Bank. Lustig, Nora. 2000. Crises and the Poor: Socially Responsible Macroeconomics. *Economía* 1(1): 1-30.
78. Fischer, Stanley. 1993. The Role of Macroeconomic Factors in Growth. *Journal of Monetary Economics* 32: 485-512. Easterly, W. and Rebelo, S. 1993. Fiscal Policy and Economic Growth: An Empirical Investigation. *Journal of Monetary Economics* 32(3): 417-458. Easterly, William. 2001. *The Elusive Quest for Growth*. Cambridge, MA: MIT Press.
79. Ahlquist, J.S. 2006. Economic policy, institutions, and capital flows: portfolio and direct investment flows in developing countries. *International Studies Quarterly* 50(3): 681-704.
80. Easterly, W. and Rebelo, S. 1993. Fiscal Policy and Economic Growth: An Empirical Investigation. *Journal of Monetary Economics* 32(3): 417-458. Ball, Laurence and N. Gregory Mankiw. 1995. "What Do Deficits Do?" in *Budget Deficits and Debt: Issues and Options*, Kansas City: Federal Reserve Bank of Kansas City, 95-119. Reinhart, C., Kenneth Rogoff and Miguel Savastano. 2003. *Debt Intolerance*. NBER Working Paper 9908.
81. Pattillo, C., H. Poirson, and L.A. Ricci. 2003. Through What Channels Does External Debt Affects Growth? *Brookings Trade Forum*. Washington D.C.: Brookings Institution Press. pp. 229-58. Elbadawi, I. and K. Schmidt-Hebbel. 1998. Macroeconomic policies, instability and growth in the world. *Journal of African Economies* 7: 116-168. Burnside, Craig, Martin Eichenbaum and Sergio Rebelo. 2001. Prospective Deficits and the Asian Currency Crisis. *Journal of Political Economy* 109(6): 1155-1197. Mussa, M. 2002. Argentina and the Fund: From Triumph to Tragedy. *Policy Analyses in International Economics* 67. Washington D.C.: International Institute for Economics. Cohen, D. 1993. Low Investment and Large LDC Debt in the 1980s. *American Economic Review* 52: 437-49. Servén, L., 1997. Uncertainty, Unstability, and Irreversible Investment: Theory, Evidence, and Lessons from Africa. World Bank Policy Research Working Paper No. 1722.
82. Christiaensen, L., L. Demery, and S. Paternostro. 2003. Macro and Micro Perspectives of Growth and Poverty in Africa. *The World Bank Economic Review* 17: 317-334. World Bank. 2005. *Pro-Poor Growth in the 1990s: Lessons and Insights from 14 Countries*. Washington D.C.: World Bank. Lustig, Nora. 2000. Crises and the Poor: Socially Responsible Macroeconomics. *Economía* 1(1): 1-30.
83. Sarah Iqbal, Asif Islam, Rita Ramalho, Alena Sakhonchik. 2018. Unequal before the law: Measuring legal gender disparities across the world. *Women's Studies International Forum* 71, pages 29-45. Esteve-Volart, Berta. 2004 *Gender Discrimination and Growth: Theory and Evidence from India*. London School of Economics and Political Science. Klasen, Stephan. 1999. Does gender inequality reduce growth and development? Evidence from cross-country regressions. Working Paper No. 7, *Policy Research Report on Gender and Development*. Washington, D.C.: The World Bank. Dollar, David, and Roberta Gatti. 1999. Gender inequality, income, and growth: Are good times good for women? Working Paper No. 1, *Policy Research Report on Gender and Development*. Washington, D.C.: The World Bank. Morrisson, Christian and Johannes Jütting. 2004. The impacts of social institutions on the economic role of women in developing countries. Working Paper No. 234. Paris: OECD Development Centre. Morrison, Andrew, Dhushyanth Raju, and Nistha Sinha. 2007. Gender equality, poverty, and economic growth. Policy Research Working Paper No. 4349. Washington, D.C.: The World Bank Doepke, Matthias, Michele Tertilt, and Alessandra Voena. 2011. The economics and politics of women's rights. Working Paper.

84. World Bank. 2016. *Women, Business, and the Law 2016: Getting to Equal*. Washington, D.C.: World Bank.
85. Kennedy, E. and P. Peters. 1992. Household food security and child nutrition: the interaction of income and gender of household head. *World Development*, Vol. 20, Issue 8, August 1992: 1077-1085. Hoddinott, John, and Lawrence Haddad. 1995. "Does Female Income Share Influence Household Expenditures? Evidence From Cote D'Ivoire." *Oxford Bulletin of Economics & Statistics* 57 (1): 77 – 96. World Bank. 2001. *Engendering Development through Gender Equality in Rights, Resources, and Voice*. ISBN 0-19-521596-6. Ranis, Gustav, Frances Stewart and Alejandro Ramirez. 2000. Economic growth and human development. *World Development*, 28(2): 197-219. Thomas, Duncan. 1990. Intra-household resource allocation: An inferential approach. *The Journal of Human Resources*, 25(4): 635-664.
86. World Bank. 2016. *Women, Business, and the Law 2016: Getting to Equal*. Washington, D.C.: World Bank.
87. Blau, Francine. 1996. Where are We in the Economics of Gender? The Gender Pay Gap. *NBER Working Paper* 5664. Ali, Khadija. 2000. Structural adjustment policies and women in the labour market: Urban working women in Pakistan. *Third World Planning Review*, 22(10). Fontana, Marzia and Cristina Paciello. 2007. *Labour Regulations and Anti-Discrimination Legislation: How Do They Influence Gender Equality in Employment and Pay?* Sussex: Institute of Development Studies.
88. Klasen, S. 2018. The Impact of Gender Inequality on Economic Performance in Developing Countries. *Annual Review of Resource Economics*. 10, 279-298. Verick, S. 2018. Female labor force participation and development. *IZA World of Labor*. Mukherjee, P. and Mukhopadhyay, I. 2013. Impact of Gender Inequality on Economic Growth: A Study of Developing Countries. *IOSR Journal of Humanities and Social Science*. 13(2) 61-69.
89. Verick, S. 2018. Female labor force participation and development. *IZA World of Labor*. Wodon, Q. and De La Briere, B. 2018. Unrealized Potential: The High Cost of Gender Inequality in Earnings. *The World Bank Group*. Ferrant, G. and A., Kolev. 2016. Does gender discrimination in social institutions matter for longterm growth?: Cross-country evidence. *OECD Development Centre Working Paper* n°330.
90. Klugman, J., Hanmer, L., Twigg, S., Hasan, T., McCleary-Sills, J., and Santamaria, J. 2014. *Voice and Agency: Empowering Women and Girls for Shared Prosperity*. Washington, D.C.: World Bank. World Bank. 2016. *Women, Business, and the Law 2016: Getting to Equal*. Washington, D.C.: World Bank.
91. UNICEF. 2005. *Early Marriage: A Harmful Traditional Practice a Statistical Exploration*. New York, N.Y.: UNICEF. World Bank. 2016. *Women, Business, and the Law 2016: Getting to Equal*. Washington, D.C.: World Bank.
92. Parsons, E., Kes A., Petroni, S., Sexton M., and Wodon Q. 2015. *Economic Impacts of Child Marriage: A Review of the Literature*. International Bank for Reconstruction and Development: Taylor & Francis. Duflo, E. 2011. *Women's Empowerment and Economic Development*. Cambridge: National Bureau of Economic Research. Wodon, Q., Nguyen, M.C., and Tsimpo, C. 2016. Child Marriage, Education, and Agency in Uganda. *Feminist Economics* 22:1, 54-79
93. Brush, C. Cooper, S. 2012. Female Entrepreneurship and Economic Development: An International Perspective. *Entrepreneurship & Regional Development*. 24(1-2) 1-6. Bahmani-Oskooee M., Galindo MÁ., Méndez M.T. 2012. Women's Entrepreneurship and Economic Policies. In: Galindo MA., Ribeiro D. (eds) *Women's Entrepreneurship and Economics. International Studies in Entrepreneurship*, vol 1000. Springer, New York, NY. [https://doi.org/10.1007/978-1-4614-1293-9\\_3](https://doi.org/10.1007/978-1-4614-1293-9_3)
94. World Bank. 2016. *Women, Business, and the Law 2016: Getting to Equal*. Washington, D.C.:

World Bank.

95. Klerman, D. 2006. Legal Infrastructure, Judicial Independence, and Economic Development. *Center in Law, Economics and Organization Research Paper Series and Legal Studies Research Paper Series*, Research Paper No. C06-1, at 1, 4. Univ. S. Cal. Ctr. In Law Econ. & Org. World Bank. 2016. *Women, Business, and the Law 2016: Getting to Equal*. Washington, D.C.: World Bank.
96. UN Women. 2013. Realizing Women's Rights to Land and Other Productive Resources. *United Nations Human Rights Office of the High Commissioner*. Daley, E., Flower, C., Miggiano, L., and Pallas, S. 2013. Women's Land Rights and Gender Justice in Land Governance. *International Land Coalition*. Yao, P. 2014 The right to inherit in customary law: an obstacle to women's emancipation in Ivory Coast. In *Take Back the Land! The Social Function of Land and Housing, Resistance and Alternatives* Mathivet, C. (ed.) Habitat International Coalition. Claassens, A. 2009. Who told them we want this Bill? The Traditional Courts Bill and rural women. *Agenda: Empowering Women for Gender Equity* 82 9-22. Claassens, A. 2005 Women Customary Law and Discrimination: The Impact of the Communal Land Rights Act. *Acta Juridica* 42.
97. UN Women. 2013. Realizing Women's Rights to Land and Other Productive Resources. *United Nations Human Rights Office of the High Commissioner*. Daley, E., Flower, C., Miggiano, L., and Pallas, S. 2013. Women's Land Rights and Gender Justice in Land Governance. *International Land Coalition*. Yao, P. 2014 The right to inherit in customary law: an obstacle to women's emancipation in Ivory Coast. In *Take Back the Land! The Social Function of Land and Housing, Resistance and Alternatives* Mathivet, C. (ed.) Habitat International Coalition. Claassens, A. 2009. Who told them we want this Bill? The Traditional Courts Bill and rural women. *Agenda: Empowering Women for Gender Equity* 82 9-22. Claassens, A. 2005 Women Customary Law and Discrimination: The Impact of the Communal Land Rights Act. *Acta Juridica* 42.